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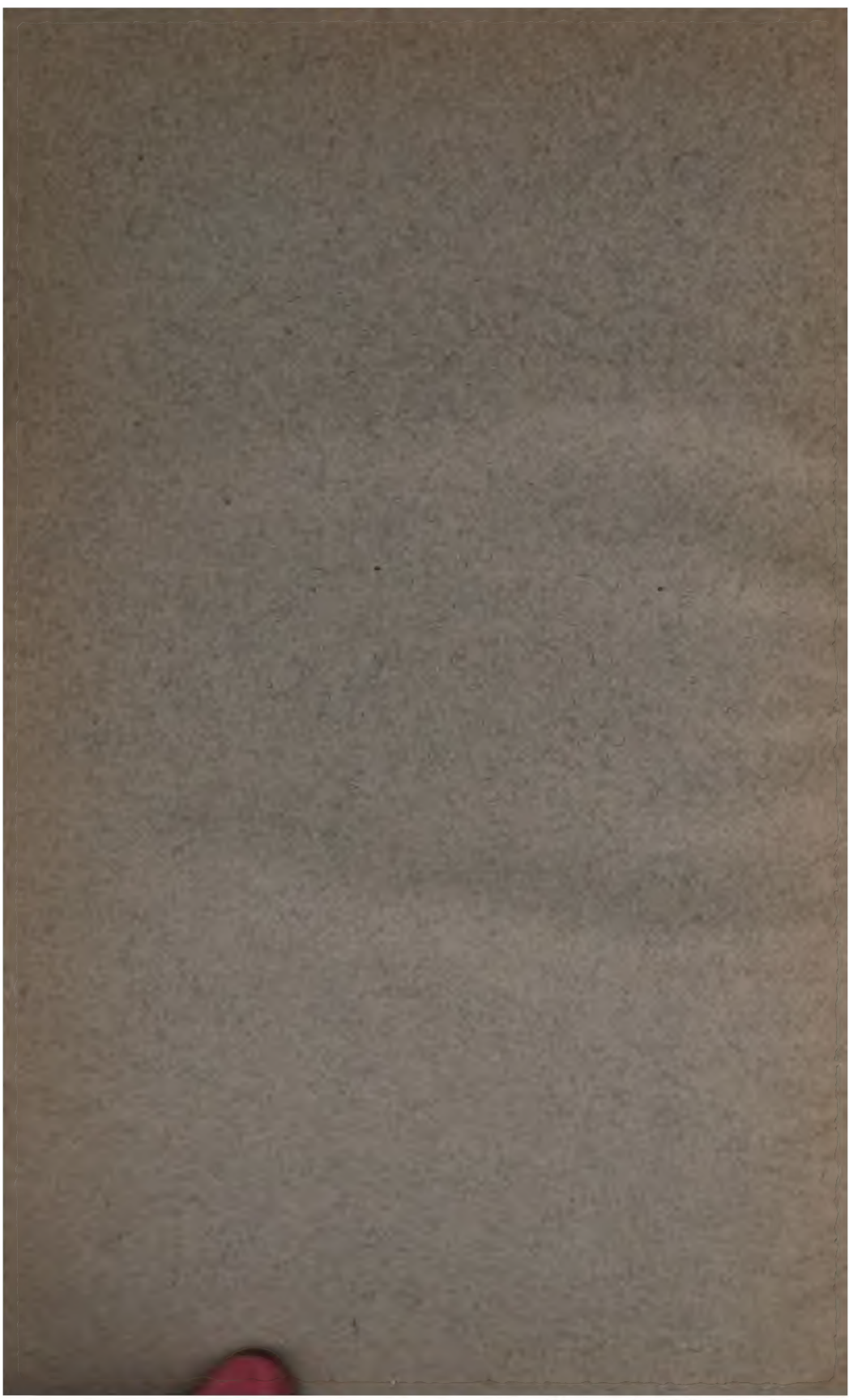

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ON

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VOLUME 3.

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[Introductory Letter to Volumes 2 and 3 of the Series.]

To Sir G. W. KEKEWICH, K.C.B.,
Secretary of the Education Department.

SIR,

I HAVE the honour to present to you the accompanying volumes of Reports on Educational Subjects, which form a selection from the memoranda prepared by or for the Office of Special Inquiries and Reports during 1897–98.

These volumes, like that published last year, form part of a series on the educational systems of this and other countries. In view of the interest now taken in the comparison of different methods of teaching and of different forms of school-organization, it is hoped that the following reports may be found useful by students of education.

I desire to take this opportunity of acknowledging the courtesy of the Prussian Government in acceding to a request, transmitted to them through the Foreign Office, for permission to publish a complete translation of the "Curricula and Programmes of Work for Higher Schools in Prussia," and that of the Charity Commissioners for England and Wales in contributing a paper on the system of Intermediate Education in Wales.

Thanks are also due to a number of ladies and gentlemen, in this country and abroad, for their kindness in contributing reports on various educational subjects for publication on the present occasion.

The United States Commissioner of Education and the President of Harvard University have both been so good as to promise to prepare essays on some aspects of American education, but their reports are deferred until next year owing to their having been prevented from completing their contributions in time for these volumes.

Each Report bears the name of its author, and it should be understood that only the writers are responsible for the opinions therein expressed.

I am, Sir,
Your obedient servant,
MICHAEL E. SADLER,
Director of Special Inquiries and Reports.

Education Department Library,
Cannon Row,
London, S.W.

September, 1898.

VOLUME III.

CONTENTS.

Page

1. The National Organisation of Education of all grades as practised in Switzerland. - - - - 1

By Mr. R. L. Morant, Assistant Director of Special Inquiries and Reports.

2. Problems in Prussian Secondary Education for Boys, with special reference to similar questions in England. - - - - - - - - - - 83

By Mr. M. E. Sadler.

3. "The Curricula and Programmes of Work for Higher Schools in Prussia." - - - - - 253

Translated by Mr. W. G. Lipscomb, Assistant-Master in University College School, London, and Hon. Sec. of the Modern Language Association.

4. The Higher Schools of the Grand Duchy of Baden; their development and organisation. - - - 322

By Mr. H. E. D. Hammond, Assistant-Master in the Edinburgh Academy.

5. Strömungen auf dem Gebiet des Schul- und Bildungswesens in Deutschland. - - - - - 415

Von Professor Dr. W. Rein in Jena.

6. Tendencies in the Educational Systems of Germany.—(A translation of Professor Rein's paper). - 438

By Mr. F. H. Dale, of the Education Department.

7. The Teaching of Modern Languages in Frankfurt a/M and District, with some account of the Frankfurter Lehrpläne of 1892. - - - - - - 461

By Mr. Fabian Ware, Assistant-Master in Bradford Grammar School.

8. The Teaching of Modern Languages in Germany. - 481

By Miss Mary Brebner, Travelling Scholar of the Gilchrist Trust.

1396. Wt. 11488. 3000.—12/98. Wy. & S. a 2

Page

9. The Teaching of Foreign Languages. - - - 499

By Professor Dr. Emil Hausknecht, Director of the 12th Realschule, Berlin (translated by Mr. Harold W. Atkinson, Assistant-Master at Rossall School).

10. The Teacher of Modern Languages in Prussian Secondary Schools for Boys. His education and professional training. - - - - - - 519

By Mr. Fabian Ware, Assistant-Master in Bradford Grammar School.

11. Higher Commercial Education in Antwerp, Leipzig, Paris, and Havre. - - - - - - - - 554

By Mr. M. E. Sadler.

12. The Present Position of Manual Training in Germany. - - - - - - - - - - - 627

By Dr. Otto W. Beyer, of Leipzig-Gohlis (translated by Mr. A. E. Twentyman, of the Education Department).

13. The Secondary Schools of Sweden - - - - 649

By Dr. Otto Gallander, of Hudiksvall.

14. Elementary Education in the Grand Duchy of Finland. - - - - - - - - - 672

By the Baron Dr. Yrjö-Koskinen, Director of the Training College at Jyvœskylœ.

Volume I. of Special Reports (1896-7), contained the following Papers:—

1. Public Elementary Education in England and Wales, 1870-1895.
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OF

NATIONAL EDUCATION OF ALL GRADES

AS PRACTISED IN

SWITZERLAND.

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MATTHEW ARNOLD'S Thesis, as summarised in "Thomas and Matthew Arnold" (page 208), by SIR JOSHUA FITCH.

THE ORGANISATION OF EDUCATION IN SWITZERLAND.

ANALYSIS.

INTRODUCTION.

PAGE

National characteristics are essential factors of national systems of education - - - - - - - - - - - - - - - 7

Appreciation of this truth in Switzerland - - - - - - - - 7

Historical differences between the Cantons or States of the Swiss Federation—General heterogeneity of Switzerland - - - 8

Its comparability with England - - - - - - - - - - 8

(i.) The varieties of nationality in Switzerland - - - - - 9

(ii.) The varieties of language in Switzerland - - - - - 9

The bearing of language differences on educational systems - 10

(iii.) The varieties of religion in Switzerland - - - - - - 10

Results of these differences on Swiss systems - - - - 10

(iv.) Some points of unity - - - - - - - - - - 11

I.—THE BUND, or the Federation of the States, in its relation to Education.

Primary Education not touched by the Bund, except very generally - 11

Reasons for this - - - - - - - - - - - - - - - 12

Historical. Religious. Philosophical. A fundamental point - 13

Illustrations and contrasts from elsewhere - - - - - - 13

Federal Law on Compulsory Primary Education - - - - - - 13

Ditto on Child labour in factories - - - - - - - - 13

Ditto on Military service - - - - - - - - - - 14

Ditto on Examination of all adult males at enlistment - - 14

Ditto on Military drill for boys and youths - - - - - - 15

Ditto creating Federal Grants for Technical and Commercial Education - - - - - - - - - - - - - 16

Ditto establishing a University of Technology and Applied Science and Mathematics - - - - - - - - 16

II.—THE PRINCIPLES AND THEORY OF STATE CONTROL IN EDUCATION.

Swiss theories of the functions of the body politic in Education - - 17

Early origin of State action in Switzerland - - - - - - 17

Contrast between Swiss and English views on this matter - - - 18

Swiss view of Education as a prime function of the body politic - - 19

Swiss notions of a central and a local authority - - - - - 19

PAGE

Nature and extent of the divisions into Cantonal areas - - - - 20

Effects of having Cantonal divisions, instead of one Federal authority, *e.g.* local patriotism; contrast with England; non-local schools, &c. - 20

Differences between the Cantonal system and any County system in England - - - - - - - - - - - - - - - 21

Principle of freedom of locality, yet under control of centre - - - 22

The relation of freedom to authority - - - - - - - - 24

Comparison and contrast with English practice - - - - - - 24

Rationale of the necessity for central control in a free or decentralised system - - - - - - - - - - - - - 24

III.—THE CANTON AND THE COMMUNE IN RELATION TO EDUCATION.

Actual organisation of local and of central authorities. Various types arranged in three main categories - - - - - - - - 25

(*a*) Centralised system. Bern as type - - - - - - - - 25

Its use of professional conferences and expert advice - - - - - - - - - 26

Its use of local opinion - - - - - - 26

The Bern Central Authority - - - - 27

The Bern system of Local Authorities - - 27

The retention of central control - - - 28

(*b*) A less centralised system. Zurich as type - - - - - - 28

The Zurich Central Authority. Education Council - - - - - - - - 28

Centrally appointed Commissions for the Higher Schools - - - - - - - 29

Zurich Local Authorities - - - - - 29

(i) The Provincial authority - - - 29

(ii) The District authority - - - 29

(iii) The Communal authority - - - 30

Certain defects of over-decentralisation in this system - - - - - - - - 30

(*c*) General principles of local and central organisation - - - - 31

(*d*) Contrast with English arrangements and lack of organisation - 31

IV. THE FINANCIAL ORGANISATION OF EDUCATION.

1. *Principles of Grants:*

Two main principles: (i.) Public education provided from public funds - - - - - - - - - 33

(ii.) Grants take the form of a share in actual expenditure - - - - - 33

That our component parts of the financial system, viz.: Commune District, Canton, Bund - - - - - - - 33

PAGE

How, and by whom, the different grades of education are severally provided for - - - - - - - - - - - - 34

Primary Education.—The function of the Commune - - - - 34

The Schulfonds or permanent school fund - 35

Gradual increase of central participation - - 35

Table showing varying participation of central and of local funds in primary education - 37

Central grant mainly consists in sharing cost of salaries - - 38

Reasons and advantages of this system - - - - - - - 38

The three different systems of central participation in educational expenditure, *i.e.*, of central grants to education - - - - 36

(i.) Grant based on fixed proportion of total expenditure - 40

(ii.) Fixed proportion modified by local necessities - - 40

(iii.) Local necessitousness the determining factor - - 40

Secondary and Technical Education - - - - - - - - 42

Allocation of definite share of cost - - - - - - - - 43

The higher the education, the wider the area which provides it - 43

Contrast between Swiss systems of grants and the complexity of the English systems - - - - - - - - - - - 43

2. *Sources of funds* for the various grades of education - - - - - 45

The system of local and central taxation: its three main principles 46

Direct taxation on both capital and income - - - - - 46

Examples of actual tax burdens, and the part played therein by educational rates - - - - - - - - - - - 49

3. *Allocation of funds* to education as one of the many public requirements - - - - - - - - - - - - - - - - 52

Ad hoc systems are rare - - - - - - - - - - 52

Education not treated as a separate function of local government 53

Methods, not amounts, of expenditure are fixed by the Education Authority - - - - - - - - - - - - - - 53

Detailed completeness of Swiss organisation - - - - - - 54

Total expenditure on each individual grade of education - - 54

Proportion of each grade to the others - - - - - - - 55

Apportionment of burden amongst varied areas and authorities - 54

Apportionment of expenditure to each grade of education - - 56

Apportionment of funds to education as compared with other public needs - - - - - - - - - - - - - - 57

Table illustrating this - - - - - - - - - - - 57

Tables of actual appointment of expenditure to each grade of education and to each area and authority - - - - - - 60

V.—General Deductions to be Drawn from Swiss Educational Organisation.

PAGE

(*a*) Value of decentralisation of finance and of direct management and responsibility - - - - - - - - - - - - - 62

(*b*) Value of central control at same time - - - - - - - - 62

(*c*) Value of complete and comprehensive organisation of *all* grades of education - - - - - - - - - - - - - - 64

(*d*) Contrast between Swiss organisation and English chaos in public education - - - - - - - - - - - - - - 66

(*e*) What is meant by complete organisation and what is achieved thereby 66

APPENDIX.

A.—Chart showing approximately the relation of expenditure to excellence in primary education - - - - - - - - - - 69

B.—Diagram showing the great differences between the various Cantons composing the Bund, in respect of area, productivity, population, industry, commerce and agriculture, with English comparisons - 70

C.—Educational map of Bern Canton, showing completeness and distribution of school supply - - - - - - - - - - - —

D.—Educational statistics of Bern Canton, with English comparisons - 71

E.—Detailed description of the educational arrangements of a small rural Swiss Commune, from notes taken on the spot, and detailed comparisons with similar English circumstances - - - - - 73

F.—Details of comparison between Swiss and English Expenditure on Education out of public funds - - - - - - - - 78

G.—Short Bibliography of Swiss education- - - - - - - - 82

INTRODUCTION

It is an old saying that every people possesses that form of Government which is, for the time being, best suited to its actual requirements and conditions. In so far as this is anything more than a verbal truism, it expresses a profound law of social science: a law which is of even greater force in regard to the *educational* than to the political system of every people; yet its very existence in the sphere of education is as yet by no means widely recognised. On the contrary, one hears it constantly said that an increased success or development of a particular nation is the outcome, and the necessary outcome, of its particular educational system and methods: or that the comparative stagnation, or losses, of another nation could be straightway prevented, were it only to adopt the educational system of the other. Yet closer reflection and observation make it clear that in both nations the differences both of methods and of effects are in fact due to certain intrinsic qualities and conditions of the national character, temperament and aims, which are themselves the absolutely conditioning factors of each and every educational effort, whether of the nation, the local bodies, or the individual: and that, in reality, the effects and results attributed to, and largely obtained from, the educational organization of any particular nation are *only* obtainable (can indeed *only* be brought even into process of causation) under similar conditions of character and temperament, whether in the governed or the governing classes respectively, or in the people as a whole.*

National characteristics inseparable from national systems of education.

Now, in Switzerland, the force of this social and educational truth is so fully realised, and the free play requisite for the effects of intrinsic differences, national, social, and religious, is so highly maintained, that in this country of barely three million inhabitants there is no one universally prevailing system of national education, in any grade of schools or of instruction; and it is practically impossible to speak of any particular educational system or method as "obtaining in Switzerland," since every portion

Application of this truth to Switzerland.

* From this it follows that we have by no means explained the causes of the increased commercial successes of (say) Germany when we have described her educational methods; and that these same methods could only produce these successes when certain other national and social conditions are at work, which may, or may not, exist in the peoples with whom Germany is waging successful commercial competition. In fact, that the intrinsic sociological characteristics of every people are an essential and vital factor in its *educational* evolution, and absolutely determine from time to time the form which the development of the latter must assume if it is to be in any permanent sense effectual and national. We must not, of course, leave out of count the infinite possibilities of varied developments ever present and ever cropping up in the evolutionary processes of the social as of the human or animal organism, and themselves ever capable of further development to such an extent as often to bring about real and vital changes in the actual attributes of the individual. It is, in fact, in seeing, in seizing upon, and in working out these new growths that true statesmanship so largely consists. But none the less is it true that the considerations stated in the text above must always be predominantly present at any one particular moment of time when questions of serious social changes are under immediate contemplation.

of the country preserves its own educational independence and idiosyncrasies, and there is no one law or regulation for all. The reason of this is mainly historical; * and in order that the origin and effects of these differences might be properly explained it would be necessary to relate the story of the country's growth, and the various stages through which it has passed from the first league of the three simple mountain peoples of Uri, Schwytz and Unterwalden in 1291, its growth into the combination of thirteen cantons in 1513, its struggles with the growth of wealthy and tyrannising commercial centres on the one hand, and with aristocratic and anti-democratic dynastic developments on the other, its temporary and unnatural transformation into the Helvetic Republic in 1798, the Act of Mediation, with nineteen cantons in 1803, the Federal Pact with twenty-two cantons in 1815, its desperate internal religious struggles and divisions in 1843, the new and popular constitution with a Federal Council and two Federal Assemblies in 1848, down to the finally revised Constitution of 1874, by which the 25 Cantons are now bound together, making "union but not unity," forming one nation as regards their relations with the rest of Europe, but remaining still a congeries of different races, different peoples, different tongues,—each one strong in its own independence, and holding closely to its own historical traditions and possessions, in spite of the ever-increasing centralising forces of the present day. It is these reasons which make the study of Swiss education specially interesting and valuable to Englishmen: for it cannot be said of the Swiss that they are, like the Germans, "too disciplinable and too disciplined" to furnish us with any easily applicable educational precedents, or that, like the French, they are too highly centralised in their tendencies, and too clearly logical in their theories, to be serviceable to us for legislative or administrative guidance. And we can find in Swiss experiences of modern educational developments the most pregnant of warnings, as well as the most convincing illustrations of general principles; and this in a field where there has been almost no surrender either of the truest of democratic methods, or the best of aristocratic† guidance, of the greatest freedom of local and individual initiative and effort, or of the firmest retention of a rational form of wise central control.

Historical differences of the Swiss Cantons.

Marked heterogeneity of Switzerland.

Its comparability with England.

Yet it is these same reasons of widely varying historical experiences that make it difficult to give, in a short memorandum, any clear presentment of the present form of Swiss Education as a whole. Even the briefest account must be prefaced to some extent by an account of the actual conditions that underlie and have produced it.

In the first place it must be remembered that strong ethnological differences exist between the different parts of the

* An admirable though brief history of Swiss Education will be found in Vol. VIII. of Dr. Huber's great work "Schweizerische Schulstatistik," and another in the "Histoire de l'Instruction Publique du Canton de Berne," by Kummer. A good English treatise is to be found in "The Swiss Confederation," by Sir F. O. Adams. All these are in the Education Department Library, Whitehall.

† In the Greek etymological, not the social, sense.

country. There are the portions which have naturally looked to Germany for their educational inspirations and organisation. There are those which from their earliest beginnings have maintained a sturdy independence and an ultra-democratic simplicity. There are the large and prosperous Cantons which have inherited and preserved a strongly French influence and tradition. Others have passed but recently, and after heavy struggles, from a close oligarchical form of government to an intensely democratic regime, and so possess the extremely developed "progressive" tendencies natural to a period of strong reaction against conservatism. In others, again, the Catholic Church has maintained a close hold upon the whole people; and the whole field of education from the primary school to the University is entirely Catholic, yet without involving the direct or exclusive control of the Hierarchy as distinct from the laity of the faith, and possessing by no means the *least* progressive of the Swiss systems of popular education. While in others it has been the strong spirit of Protestantism which has raised the whole standard of the Volksschule and the Higher School alike, and created in the minds of each and all the conviction of the prime necessity of a constantly improving national education, and a determination at the cost of any sacrifices effectually to bring this about.

(i.) The varieties of nationality in Switzerland.

Moreover these national differences which so closely affect many questions of educational aims are also visible in wide differences of language. Of the three million inhabitants of Switzerland,* some 71 per cent. speak German as their mother tongue; these are specially in the centre, the north, and the north-east; as many as 21 per cent. have French as their mother tongue, forming mainly the western and southern portions; 5 per cent. speak only Italian, and some 2 per cent. Romansch, in the south-east. And it must be borne in mind that the Cantonal divisions by no means correspond with those of language. Thus in the Cantons of Vaud, Geneva and Neuchatel, though they are mainly French, there are 10, 11, and 21 per cent. respectively of the inhabitants who speak only German; and in Freiburg and Valais the proportion is as high as 31 and 32 per cent. The Canton of Bern, again, though mainly German, has some 16 per cent. wholly French-speaking inhabitants. In Tessin the great majority speak only Italian, as do also a considerable portion of the population in Geneva and Vaud. In the Canton of Grisons out of a total population of a hundred thousand, 14,000 speak only Italian, 32,000 Romansch, and 46,000 German, and this in an area of only 7,184 sq. kilometres, *i.e.*, three wholly different languages in a district about the size of the West Riding of Yorkshire. How difficult are the problems (educational, legislative, and administrative) inseparable from such a polyglot population can perhaps be hardly realised by an Englishman, who is accustomed to the exclusive pre-

(ii.) Varieties of Language.

* The census of 1888 gave a total of 2,917,754, and the estimated annual increase is about 5 per mille per annum, thus making an estimated population at the present day (1898) of about 3,067,000.

valence of his own language all over his own country and also over large portions of the rest of the earth's surface. The difficulties will be the more obvious when one considers the immense differences for educational purposes between the structure and genius of French and of German, and the wholly different basis which is necessarily offered for the linguistic training and the mental discipline of the schoolboy, according as the one or the other is his mother tongue; and the widely different syllabus of work consequently necessitated for the one portion of the Canton and the other, not merely in Secondary education but also in the treatment of the subjects taught in the Primary schools. This point can hardly be too much emphasised when comparing the syllabus of schools in the different countries of Europe: for it is inevitable in the nature of things that the programme of an English-speaking school should be dissimilar in *many* respects from that of a French or German school, if mental discipline is to be a really important element of consideration in language study.

The bearing of linguistic differences on education.

(iii.) Varieties of Religion.

In addition to this language difficulty, however, there must be borne in mind the differences of religious belief, existent everywhere in Switzerland, and in some Cantons reaching the most crucial proportions. Thus in the Canton of St. Gallen the Catholics and Protestants are in the proportion of 60 to 40, in Geneva 50 to 50, Grison 45 to 55, and Aargau 44 to 56: an approximation to equality which in the light of English and of Canadian School Board experiences would suggest extreme difficulties in matters of local control in education. And even in the more strongly Protestant Cantons the same difficulty exists. In the home of Zwingli, Zurich, some 10 per cent. are Catholics, as is also the case in Bern and Neuchatel; in Glarus and Bâle Campagne the Catholics are 20 per cent., and in Thurgau and Bâle Ville as many as 30 per cent. of the whole.*

Variety of educational systems arising from Swiss heterogeneity.

When, therefore, one realises not only the inevitable varieties of the educational problems directly arising from these differences both of language and of religion, but also, so close is the connection between the history of the Swiss peoples and their education, the ethical problems that lie behind them, of which even the briefest exposition is impossible within the compass of this memorandum, it cannot but be seen that it is impossible, as has been said, to treat the Educational System of Switzerland as one undivided whole. Indeed, as a matter of fact, each of the 25 Cantons has its own separate and independent organisation, and there are, in regard to education and schools, very few actual legislative enactments which can be spoken of as common to the whole country. None the less, nay rather the more, as has before been hinted, is it possible to find very many points in which Swiss educational systems are fruitful of suggestions to a country like our own, where variety of type and freedom of individual effort have been so strenuously preserved not only in Secondary education, but also in all except the mere administrative aspects of Primary education.

* In Appendix B will be found diagrams showing statistically the highly heterogeneous character of the various Cantons in Switzerland.

I.

THE BUND, OR FEDERATION OF STATES, IN ITS RELATION TO EDUCATION.

In studying so complex an organism it will probably be simplest to consider first those points in which some unity or attempt at unification is to be found. Therefore, although both historically speaking, and as matter of evolutionary fact, education in Switzerland has grown from and been based upon the beginnings of individual localities, and has only quite recently become a matter of effective concern to the country as one whole (and even this in very limited spheres), yet it will be simpler to take note, first of all, of the part played by the Bund, or Federation, before taking the Cantons individually.

Some points of Unity.

I. The Federation or Bund.

In the 121 clauses of the Federal Constitution of Switzerland, there is only one dealing directly with Education, viz., article 27. This empowers the Bund to establish and maintain, or to assist, a University or other institution for "higher education."*

It then expressly states that the provision of sufficient Primary Education is a matter for the several Cantons individually; that it must be always under the control of the Canton,† and be both compulsory and gratuitous. No definition, however, is given by the Bund of the limits within which, or of the extent to which, "Primary Education" is thus to be compulsory and free. This and all other questions of Primary Education are left wholly to the free will of the several Cantons, and kept out of the hands of the Bund.‡

Primary Education not touched by the Bund

Not that the country as a whole is indifferent to the provision of Primary Education, or that her best men have neglected it, or considered it as outside the province of State action and control. On the contrary, the Swiss people have warmly felt its national importance from very early stages in their history, and have given it the closest attention, and in many places made it a matter of communal and cantonal legislation nearly half a

* No action has as yet been taken by the Bund, under this article, beyond supporting the already existing Federal Polytechnic, or Technical University, in Zurich. The other Swiss Universities and places of Higher Instruction are wholly Cantonal.

† Not that private schools are forbidden, but that they must never be otherwise than amenable to the ultimate jurisdiction of the Cantonal authority.

‡ It should be added that the same clause says "The Bund is empowered to take the necessary steps against any Canton which does not fulfil these duties," but no Federal Department has yet been given cognisance of Primary Education, nor have steps ever yet been taken by the Bund to interfere with Primary Schools. The attempt to establish a Federal Inspector of Primary Education was recently rejected by a large majority of votes in the National Referendum—so jealous are the Cantons of any Federal interference with their primary schools.

century before we in England had even gone as far as giving the first grant of £20,000 of State funds to elementary schools.* Indeed, Switzerland formulated a scheme for universal compulsory public primary schools nearly a century before England took this step, and exerted prodigious efforts, both pecuniary and educational, in developing the People's Schools. Moreover, she saw, in action, the far-reaching effects upon the people, which resulted from the use of particular methods and systems in public primary schools before we had commenced any systematic study either of methods or administration. But it was just this long experienced realisation of the inevitable effects of the Primary School on popular development that made the various Swiss peoples (and still makes them) so determined, in the midst of the general tendencies to political centralisation, to retain the control of their Primary Schools each in their own hands; and this not with a view to securing a comfortable leniency of standard in regard to efficiency, but from a conviction, based both on reason and on experience, that in the direct control of the Primary School lies the control of the people's development, the people's morale, the people's faith, and the people's *opinions*. And all these matters seemed too vital to be placed at the mercy of a mere haphazard numerical majority of the several Cantonal representatives in the Federal Parliament, while the Cantons differ so widely and deeply, as they did and do, on questions of religion and politics. Hence every proposal to extend the power of the Bund† over primary education has been met, hitherto, with the strenuous opposition of those who have cared most for the religious and moral side of the work of the public Primary Schools on the plea that differences of views on these matters are fundamental, and irreconcileable, and intrinsically incapable of adjustment within one common system. A Catholic people or Canton, it was said, could not permit that either the syllabus of its Primary Schools, or the influence exerted day by day by the teacher upon its children, should be decided by a Protestant or a possibly agnostic Central Federal Government; while an earnest Protestant was equally averse to the possibility of the influence which would necessarily be exerted, whether by a Catholic or by a free-thinking majority on his children's education. And both were agreed that the religious convictions of the teacher inevitably affect the way in which almost every school subject is placed before the child's mind and imagination, and thus cannot but materially and permanently influence the child's whole attitude of mind towards the most serious and vital matters of life and action. Thus the whole

Reasons for this.

Why the Primary School is not controlled by the Bund.

* See pages 18 and 48 below as regards some of the reasons for this.

†It must be remembered that the Bund is the collective union of several nations differing even more widely in language, religion, and temperament than do the English, Scotch, and Irish elements of our United Kingdom. And therefore, as regards the arguments above, the analogy to England would rather be as against a system of having one Educational authority for England, Scotland and Ireland together, than against a system of one authority for the whole of England by itself, such as we now actually possess. The argument might, however, be conceivably used in regard to the present unification of Wales with England for Primary Education: especially as they have separated systems for secondary Education purposes.

question of the appointment of the teachers and of the qualifications to be required of them is an exceedingly crucial one. Furthermore, it was insisted that there are vital differences in regard to the particular *political* and social bias which is given to the child (and which cannot help being given if the teacher be effective and earnest), by the Primary School; and that these differences, too, like those in the religious sphere, are incompatible and mutually exclusive, and too vital to be left, by either side, to the tender mercies of the possibly hostile views of a numerical majority in the centre.* For all these reasons, therefore, the Bund exercises no direct control over popular education (and in Switzerland all education is popular, there are practically no schools but the public schools, and the "Board School" is used by each and all); nor, from similar reasons, has it even exercised the powers given to it by Article 27 of the Constitution, for the provision of a Federal University or Federal Colleges or High Schools, except in the case of the one great Technological University at Zurich. And when, recently, the Bund was urged to meet the pressing needs of the highest type of education for modern commerce, it was decided that its provision and its direction could best be left in the hands of the large local or special authorities, and that the Bund would best render assistance by granting simple financial assistance without adding, as a condition of aid, any detailed form of centralised control.† And much the same principles have been followed in regard to the Bund's action in the matter of Technical and Professional Education.

Federal Law on compulsory Primary Education.

As far, therefore, as direct intervention of the Bund in public education is concerned, it is limited to the following pronouncement:—"Primary Education is compulsory, and must be provided free of charge and under the supervision (*leitung*) of the Canton. It must be possible for the Public Schools to be attended by the adherents of all beliefs without hurting their freedom of belief or of conscience." This is the sole universal charter of education insisted on by the Swiss Federation as a whole. As to the interpretation of the charter and the limits both of age and of attainments to which compulsion shall extend, the individual Cantons are left absolutely free to follow their own choice.

Federal Law on Child Labour.

There are, however, certain spheres of action, indirectly connected with education, in which the Bund, as representing the collective force and wisdom of the whole nation, has exercised most effective control and guidance. Thus, under Article 34 of

* It is urged also that support may be found for considerations of this nature by observing in certain countries in Europe, and to some extent in India, the inevitable effects of establishing a uniform system of education which either deliberately attempts to crush, or else fails to allow for, such differences as these, especially in the religious sphere—effects of which the outcome is visible first in a general unsettledness of convictions amongst the people, and subsequently in active disintegrating tendencies in the moral, social, and political spheres, of a magnitude that is probably not yet realised by outside observers.

† Further details regarding these and other grants and provisions for Commercial Education will be dealt with later.

the Constitution, the Bund has forbidden the employment of children in factories throughout all Switzerland before the completion of their fourteenth year, with the additional proviso that for children in their fifteenth and sixteenth years the work in the factory, together with the time given to school and to religious instruction, must not exceed eleven hours in a day—a provision of immense value and importance, in view of the work of the continuation and evening schools. The latter are often compulsory in Switzerland; but the Swiss have long decided that they can have but little good effect if the scholars come to them worn out with long hours of continuous labour.*

Federal Law on Military Service.

Perhaps the next most important point in which the Bund indirectly affects education is in its military enactments. By these, every Swiss male, without exception, is bound for a fixed amount of military service every year from the time he is twenty to the time he is forty, and from this there is no exemption. Switzerland has not thought fit to hold out exemption from military duties as a prize or reward for higher education; rich and poor, educated and ignorant, must alike take their turn. Thus there is no question, as there is in France and Germany, of an extra premium (derived from service exemption) attaching to certain types of schools, and of their being thus given, in parents' eyes, a popularity otherwise unattainable. The State, in fact, does not retain in its hands this special forcing power in favour of one or another form of education; hence this objection to so many comparisons made between English and German systems, does not apply in the case of Switzerland; and the universal military service itself, from the particular form which it takes (a few weeks' service in each year) need not be held to vitiate any possible analogies drawn from Swiss Education to English.†

Federal Law on Universal Examination of Recruits.

There is, however, one point in the Federal Military enactments which is directly educational in its effects, viz., that which prescribes a universal examination for every recruit on entering the army at his twentieth year. The examination is held by a Federal Commission; its results are always published; the numbers of failures, and the standard individually reached,

* Fuller information concerning school age and compulsion will be found in Volume I. of "Schweizerische Schulstatistik," by Dr. Huber, of Zurich. The conditions vary greatly in the different Cantons; but it may be said here that the above quoted law *has no exceptions*, and that the school age of attendance all over Switzerland is on far more systematic lines than our own, though the minimum period of a child's life actually spent in a day school may often be much less than under some of our English byelaws. Special attention is given, in the matter of school attendance regulations, as laid down by the Central Authorities, to the different character of the needs of urban and of rural districts respectively.

† For details of the system of service see "The Swiss Confederation," by Adams, p. 140. It may be added that the Swiss were the first nation in Europe to introduce a scheme of universal liability to military service: that they alone make an equal measure of military service really universal. It is true that this service interferes but very slightly with the normal life of the people. The reason of this, of course, is the smallness of the demands made upon the army, and the complete absence of foreign service. But its effects in the direction of a real fusion of all social classes cannot be disputed, as also its effects in developing an active and intelligent patriotism and *solidarity* throughout the various portions of the people.

are tabulated for every district and every Canton; and there is thus offered an annual gauging of the real and *permanent* results of popular education, for each individual, for each commune, and for each Canton*; a process which, in spite of the necessarily approximate character of the test, and of its results, cannot but have a most stimulating effect upon educational efforts, at least in the primary schools and in the evening schools for adults, both in rival districts and in rival cantons†, and, indeed on the individual youths.

Federal Law on Universal Military Drill.

A somewhat cognate point in which the Bund has directly affected Primary Schools is in the injunction of the Federal Acts of 1874, 1877, and 1883, which require every youth between ten and fifteen years old to receive instruction in military drill and exercises, as a compulsory subject of the School Programme. The minimum number of hours is specified, and the amount of apparatus; and the Bund makes a contribution in aid. It is interesting to note that a system of this kind, which has seen twenty-five years effective use in Switzerland, is being now put forward in England as a new suggestion for our Primary Schools, and a desirable subject for State-aid, in the shape of a grant from the War Office. It was proposed by the Earl of Meath, in the *Times* of January, 1898 (and supported by the Rev. J. S. Brownrigg, Secretary of the National Society, the following day), as being "an obvious and economical method of raising up a "generation of men trained in their youth to discipline and the "use of arms, and as tending to popularise the army, to increase "the number of available recruits, raise their social status, and "practically obtain for the country much of the advantage of "conscription without its burdens and drawbacks." The objections raised a few days later by another correspondent in the *Times* as to the fitness of such exercises for primary scholars might well be met by an inquiry into Swiss experience under a similar system. There is, however, an essential, and yet, perhaps, natural, difference between the Swiss practice and the English proposal; viz., that the former makes the drill compulsory, and that, too, on all classes and in all schools, not only in the

* Be it remembered that the examination does not come just at the time of leaving the primary school, when crammed or impermanent knowledge might tell; it is a gauge of the amount of primary school knowledge still left in the youth by the time he is 20; a very different thing. Moreover, no one escapes the net of this Examining Commission: even youths physically unfit for army service have to pass the examination. In fact, *every* youth of 20 years old in the whole country is examined, except those mentally deficient.

† Very interesting details of the method and working of this Recruits' Examination are given on pages 305 to 346 of the "Receuil des Monographes Pedagogiques," published at the Geneva Exhibition of 1896, and to be seen at the Education Department Library, Whitehall. The Director of the Educational Museum in Berne, who has specially studied this subject, has worked out a table of the results of the recruits' examination for each Canton during a certain period, giving side by side with these the money expenditure per scholar in the primary schools in each Canton, with the intention of showing the relation between these two sets of facts. He has kindly lent this table for publication in the Appendix to this memorandum. In considering it, a large margin for error and for the approximation of averages must be allowed, but some degree of causal connection between the two series of facts is certainly suggested by it.

Primary Schools; whereas the latter apparently contemplates its adoption only in our public elementary schools and as a permissive not a compulsory measure.*

Federal Law on Technical and Professional Education.

The rest of the general work done by the Bund for education is comprised in the Acts of 1884, 1885, 1891, and 1895, which instituted large Federal Grants for Industrial, Agricultural, and Commercial Education, as well as for Domestic Economy and other forms of Professional Education for Women.

The method and scope of this Federal aid will be considered elsewhere; it will suffice here to say that no direct establishment of schools or control of schools is contemplated, but merely financial assistance from the Federal purse in the matter of Commercial, Industrial, and Agricultural Education to Cantonal or Communal or Private efforts (Federal Grants are given to Societies, Chambers of Commerce, Industrial Unions, &c., &c.), with but a slight control of methods and system.

Federal creation of Technological University.

But the chief directly educational work of the Bund is, of course, the renowned Federal Polytechnic, situated in Zurich, a sort of University of Technology, with some 1,230 students (326 being non-Swiss, and coming from every country in Europe) and fifty-five professorships, giving some of the highest instruction known in Europe in Building and Architecture, in Engineering, in applied Mechanics, in Chemistry, in Forestry and Agriculture, and in Mathematics and Natural Science. This institution is managed by a Schulrat of five members, with a President, Vice-President, and a Secretary, directly appointed by the Federal Council; the Director of the Polytechnic is also a Federal Official. Further particulars of this great institution will be given elsewhere. It is the one and only instance in Switzerland of the direct management and control of the Bund in educational matters.

Central control.

But though the direct control of the Bund over Education is thus of a strictly limited nature (in spite of its contributions of some £100,000 sterling a year to Education in general†), this does not mean that Switzerland disbelieves in the principle of Central Control in Education. On the contrary, this principle is the root principle of all Swiss organisation of Education. But the Swiss understand this in the form of a Central Control centred in each nation comprised in the Federation (not in the conglomeration of them all), just as one finds (broadly speaking) in the States of Germany, in the States of America, and (so far as we have any Central Authorities) in each individual portion of the British Isles. And the Swiss insist on this general arrangement of Central Control on the grounds that to be effective and responsive a Central Authority must be a natural and true expression of national needs, national temperament, and the national will.

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* For a similarly characteristic national difference, in the matter of compulsory school attendance and its varying applicability to the various *social classes* of the community, compare Matthew Arnold's "Higher Schools and Universities in Germany." 1892 edition, p. xiii.

† Details of this expenditure will be given later, page 60.

II.

THE PRINCIPLES AND THEORY OF STATE CONTROL IN EDUCATION.

It is plain, then, that to understand the organisation of Education in Switzerland, we must study the part played, not by the Federation as a whole, but by the Canton and the Commune respectively in the field of education. Probably the simplest way in which the main points may be made clear will be to set forth, first of all, the view taken in Switzerland of the true function and scope of the Public School, whether Communal or Cantonal, since to the Swiss people, be it said, the public school is the means of *all* education for *all* classes. To do this at all completely, it would be necessary to trace the growth of the democratic spirit in Switzerland and of the conception of the true functions of the Commune and of the State throughout the last two centuries. There are indeed few studies more interesting than to follow the gradually widening perception of the need of a good universal Primary Education, and of adequate secondary and higher schools, and of the recognition that the provision for this need is one of the first and most natural duties of the collective power and wisdom of the Society or State.* As early as 1603 we find the government of Aargau suggesting to every Commune that they should establish a Primary School, and, soon after, making this a compulsory duty. This circular says: "The school will commence each year at the close of the harvest and other field "labours of the Autumn, and will last for twelve consecutive "weeks at least; it must be attended by each scholar for three "consecutive years." In the same way in 1675 the Canton of Bern ordered schools to be established in, and by, every parish, from public local funds, with compulsory attendance. And even as early as 1798 there were already more than 500 such schools in the Canton maintained from Communal Funds; the total population of the Canton then being only 217,165! The schools were no doubt in many cases in a sorry plight in those days, and the education given extremely scanty; but such facts as the above (and they can be paralleled from nearly every part of Switzerland) will sufficiently show how deep seated is the Swiss conviction that public Primary Schools are a national requirement, and how long it has there been recognised as a natural and essential duty of the Commune, aided, if need be, by the Canton, *to take upon itself the whole duty of educational supply without limits.* It is true

Early origin of State action in Switzerland.

* *I.e.*, of the Commune, and subsequently the Canton also; not of the large centralised aggregation of Cantons forming the State in the French sense.

that in some Cantons, especially those like Bern, which were till recently under a somewhat oligarchical régime, the Gymnasium, and the Lower Secondary Schools too, reached a comparatively better and securer position, sooner than did the Primary School. But it was but little after the close of the eighteenth century that the need of having a sound primary education as the one universal basis was fully recognised; and ever since then there has been an unceasing stream of effort to support it from public funds, and an uninterrupted recognition of this duty as being the natural and almost exclusive duty of the Commune aided by the State.

Contrast between Swiss and English views on this.

It is necessary to dwell at some length upon this essential factor in Swiss education, as it lies at the root of the whole system and its comprehension is a condition precedent of any further research. And it is the more necessary in an English memorandum, because it is not a view of education or of national life which is natural to an Englishman; it has, at least, by no means dominated our own national educational developments. For instance, our first systematised Code, in 1860, stated the object of the State grant* to public Elementary Schools to be the "promotion of the education of "children belonging to the classes who support themselves by "manual labour;" and in 1868 minute regulations were issued to limit the use of the public primary schools to this class of people†; and though the words of this limitation were withdrawn from the Code in 1871 and a wider scope was more or less vaguely spoken of in Parliament for the public elementary schools, yet there has always been a very obvious effort to keep a top limit to this application of State funds and even of local (public) funds. Nor, even under the recent rapid growth of democratic feeling and of popularly elected authorities for various purposes of local government, has a locality yet been considered absolutely **free** to do what it will with its own funds, and to carry out the possible wishes of its inhabitants by making a complete public provision of education from local rates. Indeed the provision of education has never yet been recognised in England as a natural duty of the Commune or the Municipality.‡ Moreover, one may say that, whatever may once have been the case in regard to the independence of action of the

* Then amounting to some £800,000, the total population of England and Wales being then 19,902,713. The first grant in 1833 of £20,000 was made for assisting the erection of schools specially set apart for the same purposes as above described.

† It would hardly be credited, nowadays, how minute were the regulations for excluding various classes of people from using the State-aided public Primary Schools. They were stated to be for "the labouring classes" only; who were thus defined:—"Simple policemen, coastguards, and dock and railway porters may commonly be regarded as labouring men. But petty officers in those services, excisemen, pilots, and *clerks of various kinds*, present more difficulty, and must be judged of according to the answers to the preceding inquiries, *e.g.*, Does he rank and associate with the working men or with the tradesmen of the place?" (E.D. Report 1864, page lxv.)

‡ There were, it is true, several attempts made in England before 1870 to get Parliament to give local authorities rating powers for education, but they all failed to pass the House of Commons; and even in 1870 the new powers were entrusted to a new and specially created authority independent of the authorities for local government previously existing in the cities and boroughs.

boroughs, townships or shires, it has now come to be regarded apparently as an axiom, with us, that no Locality may raise rates or spend public funds on this (or in fact any other) object without being specially empowered to do so by Parliament. And even when this latter step has been taken, local effort has often been deliberately and statutorily limited, as in the case of the maximum penny rate for Technical Instruction in the Act of 1889, the penny limit in the Public Libraries Acts, and the halfpenny limit for the intermediate education rate in Wales.* To a Swiss, on the other hand, such limitations are incomprehensible. He has learned from some two centuries of democratic development to assume, as a very condition of national life, a collectivist and communal basis for public education, with no limits upon the rights of a locality to spend its own funds upon education, and to look askance rather at the *private* provision of education† than at any extension of its growth by means of *public* funds.

Swiss view of Education as the prime function of the body politic.

Perhaps, therefore, we may best proceed, in the first place, to investigate the various forms which the Public Authorities for Education have assumed in Switzerland, before going in detail into the more vital questions of Functions and Finance. We have already seen that in all matters of Education (with the single exception of the Federal Polytechnic for the highest grades of Technological Education) the Bund exercises no direct authority or control. Hence the supreme educational authority is the Canton itself, and the local authority is the Commune. From the point of view of the geographical area which they cover and also of their respective populations, one might consider the Cantonal Authority as equivalent to our "County Authority."‡ But any such analogy would in reality be highly misleading, and any close comparisons made on this basis are useless: and this for many reasons. In the first place the separation between Canton and Canton goes very deep, historically and in every other sense. Until comparatively recently the various Cantons have each possessed wholly separate governments *for every department of State action*, and shared in none: acknowledging no common authority or bond except for purposes of military defence. They are in fact separate peoples, keenly jealous for the preservation of their individual existence; and the separation between Canton and Canton is wholly different in kind, not merely in degree, from the separation between our counties. The smallest village at the farthest corner of a Canton will invariably and jealously look to its own Cantonal Centre for everything, and may be

Swiss forms of a Central and a Local Authority.

Nature and extent of the Cantonal Authority.

* This point is further considered on pages 47-8 below as being a fundamental difference of political conception in matters of (so-called) local government. In a few towns the library rate is more than a penny, but this has been, in every case, authorised by a special local Act.

† The reasons usually urged in Switzerland for this position are (i.) that it is extremely difficult to have any certain public guarantee of the quality and standard of *private* educational supply; and (ii.) that the latter is certainly less conducive to the development of a national or a local public spirit.

‡ A list of the Cantons with population and area is given on page 37; but it must be remembered that it was not their size and population which has constituted them separate authorities (as was the case with our County Borough Authorities in 1888), but their history and tradition, their national differences, and their intrinsic heterogeneity.

wholly ignorant of the circumstances, systems, methods, and even language of a village only a mile away which is in the next Canton.

The Canton.

Hence it is natural that, as we have seen, each Canton possesses its own educational system in completeness, from the Primary School to the highest Gymnasium,* and makes all its arrangements accordingly, without reference to the educational provision existing in neighbouring districts over the border. It may be argued that this must surely involve some waste of energy and funds, and run counter sometimes to the natural and artificial routes both of locomotion and consequently of educational dissemination. To a slight extent this is perhaps true, but there are counterbalancing advantages which are immeasurable. For instance, the people in each Canton are able to grasp their own educational system in all its details, and to realise its component parts and the organic connection between those parts, and to plan out, each man for his own boys, the best educational path to follow and where to follow it; while the authorities can clearly see the working of the educational organism as a whole, as well as the function of each and every portion; and can also perceive from time to time where particular points are defective, and where new rungs in the educational ladder are requisite.† Above all, the fact that practically everyone has spent all the most impressionable years of his youth in his own Canton, first in his own small Commune at the Primary School and then, if he go further, in a neighbouring larger Commune (also of his own Canton) at the District or Sekundar School, or again in the chief town of his Canton at the Gymnasium,—all this results in a strong spirit of local patriotism, such as we in England can hardly conceive, bred as we are under a system which sends so many of our boys right away from home and native place throughout the twelve (or at least the five) most impressionable years of life. And this local patriotism not only affects the whole national and communal life of the people, but has also a direct and powerful influence upon the educational system of each Canton as a whole, and upon the education which each parent comes to desiderate for his children. Thus it has happened under these Swiss conditions that for some half a century every Canton has kept its best men engaged in thinking out on the spot and working out, for his own benefit as much as for his neighbours', a Cantonal supply of schools *of every grade* forming an organised scheme of public education, complete in every stage, adequate for the needs of the whole Canton, and within the reach of every corner of the Canton:—a scheme which shall be really complete and really organic in every point of structure, material and design, and of a character and scope directly suitable to, and complete in itself for, the requirements of his Canton. What a contrast does this at once present to

Advantages of Cantonal areas for Education.

Effects of having the Cantonal rather than Federal division of Authorities.

Local patriotism

* Only four of the Cantons possess Universities. But the University does not play so large a part, proportionally, in Swiss education as in our own, so that Cantonal intercourse is not much affected by this fact.

† For a picture of this complete provision of all grades of education in one Canton, see map in Appendix C. to this memorandum.

the amorphous and incomplete condition of any *English* County in respect of public educational provision.* To this must be added the fact that in the Canton and under the Cantonal Authority are of course included all the large towns of the Canton. They are not lifted out of it as with us, and given a separate independent existence; on the contrary they are the indispensable centres of general Cantonal effort towards which the Canton or County must naturally focus its educational forces, and from which the latter must radiate over the surrounding areas. The Swiss thus have none of those difficulties which hamper us in England concerning the relations of a County with the County Boroughs, and still more with the Non-County Boroughs and the Urban Districts, which are within its geographical area. If Warwickshire, for instance, were a Swiss Canton with Birmingham as its chief town, Birmingham city would have as now its own local authority†, but with full powers both of rating and spending, as also would Coventry; but, so, too, would Leamington, Sutton Coldfield, and every other municipality, and in fact every commune or parish throughout the area. But there would, at the same time, be the supreme County Authority over all, sitting probably at Birmingham,‡ which, while in no way controlling Birmingham city or any other place as regards their individual expenditure of their own local funds, would so apportion to the individual places the funds drawn from the common County purse as to aid educational provision just how and where the needs *of the County as a whole* most required; taking into consideration the natural means of communication and all other factors in the problem, as indicating one place or another as the best centre for one form or another form of higher or of technical education, as the case might be; the different centres being thus held suitable for receiving central aid in different proportions, to meet the expenses of providing each one its special quota *for the common Cantonal good*.§ And, inasmuch as the Central Cantonal Authority through its grants and regulations, applying to all grades of education, has a considerable voice in the creation of all educational supply, it follows that the knowledge and wide experience of the Centre, with its con-

Comparison of the Cantonal system with our County system.

* It is no exaggeration to say that not a single county in England could give a clear or even approximately comprehensive picture of all the schools, public and private, in its area; there is no list, no register, no organisation, so far as Secondary Schools are concerned. Nor is it the business of any individual or any authority to see that the supply, in all grades, is either efficient or complete. Compare Appendix D. and also page 66 below. It should be added, however, that in Wales, as distinct from England, there now exists a complete scheme of central and local organisation for intermediate schools all over the Principality, not dissimilar to that of the Swiss. Conf., the first paper in Volume 2 of the Special Reports on Educational Subjects, C. 8,988.

† Except that primary would not be separated from secondary, but the city authority for education would be one and the same for all grades of education, and it would also be an integral portion of the city authority which deals with all other local needs.

‡ But quite separately from the Birmingham City Authority.

§ The map in Appendix C. will show how carefully each district in Bern Canton is supplied with Sekundar Schools in proportion to its population, and how each Sekundar School is fixed to have a two year, or three year, or four year, or five year course, in direct relation to the needs and provision existing in its area; and lastly how the Higher Secondary Schools are placed in such sites as will best serve the varied needs of the Canton as a whole.

stant watchfulness for the good of the *whole* community, practically prevents the rise of undue overlapping, or, on the other hand, of real defects or inefficiency of supply.

Freedom of locality yet under control of centre.

Two points, then, have specially to be realised in the Swiss system of Authorities, (*a*) *the complete freedom of every locality*, even of every parish and commune, to rate itself and to spend *its own money* as freely as it pleases on educational provision of all kinds (an arrangement which is only what one would expect in a thoroughly democratic country, where the Commune has for so long been the centre, the energy point, of all social development), but at the same time (*b*) *the absolute control by the Central Authority* as regards the general educational lines which every State-aided School (and practically every School is State-aided) shall follow. This control is considered in Switzerland to be of the very essence of rational democratic government; it is recognised as a political and social axiom in every Canton, and finds expression in the general conditions as to curriculum, age limits, etc., which attach to all Central grants (other than Federal). As these grants are made in varying proportions to each and every grade of the public schools, and alone render their prosperity, sometimes their very existence, possible, they at once provide an absolutely effectual leverage for Central control, and for securing the due observance of those general conditions under which the school is established, maintained, and recognised.

Yet these general conditions, be it said, are not the occasion for that vexatious interference with the teachers or with their methods which our Secondary Schoolmasters in England (remembering former English methods of controlling primary education) so greatly and so justly fear in their own sphere, and which many of them have unfortunately come to conceive of as the only possible outcome of State organisation. The conditions are merely framed so as to demonstrate and to fix the *type* of education and the *grade*, which each school is intended to give. Every master thus knows clearly, when joining the staff of a school or taking the Headship, just what the nature and scope of his work is to be. He is thus not led into mistaken attempts, or harassed with unrealisable ambitions, to alter the character of the school from that which its circumstances and surroundings, and the money allotted to its maintenance, necessarily determine as its proper function. Nor, on the other hand, is he harassed by irrational interference or constant domination regarding his detailed methods of carrying on the work so clearly laid before him. On the contrary, he possesses a security in his educational work and a freedom from vexatious interference which too often the English master has to part with, for existence' sake. Nor need he fear the "difficult" parent or the possible ignorance of local authorities, and he is never tempted, as is his English prototype, to trim his educational sails to catch each fleeting breath of popular demands. While to the parent, again, there is the great advantage of knowing with some certainty what is the nature of the education which his boy will obtain at any school; so that the right boys go to the right schools; and, when they go, they already possess the previous preparation necessary in each case (since its nature and scope are

clearly known from its published curriculum); and, after choosing the right school for their purpose, they obtain in the school just that grade and type of education which they require, without dislocation either of the boys' lives or of the school's curriculum. Thus the schools are not involved in the hopeless task of becoming (as someone has phrased it) educational Whiteleys, with "special classes" for every sort of boy, with Latin figuring as alternative to Shorthand, and French to Mechanical Drawing, in order to meet each and all of the ever-varying demands of a hundred different parents. It is inevitable that the latter should weaken the educational discipline and solidarity in the school course; yet this is what happens all too often in England as the result of our boasted "freedom, variety, and elasticity" of arrangements in Secondary Education.

It should be added also (as one of the necessary conditions of this harmony of effort) that the Swiss, like all continental nations, are quite free from the plethora of "outside examinations" which so grievously harass the even working of our English schools. Such examinations become in fact unnecessary when there is an organised scheme of public education of all grades, under which anyone can judge from the official curriculum of each school as to the results of a boy going through any particular school course. So that instead of requiring a separate certificate of an outside examining body for every department of life which a boy can possibly enter, as is the case with us, it is found perfectly sufficient for every one's purpose (even for the most exacting professions, such as Medicine or Law) to be assured that a boy has spent so many years in a school with such and such a curriculum, or—for special purposes where absolute individual attainment must be evidenced—that he has passed the leaving examination of its top form.*

A central control of this nature over the aim and curriculum of each school is not often conceived of in England,† and yet in itself it is eminently rational and in no way contrary to the requirements of "freedom, variety and elasticity." It is obtained in Switzerland, not by the autocratic imposition of fixed time-tables or methods of teaching, but by attaching to all Central Grants given to each school (without which the Locality cannot generally afford to keep up the school) such conditions as to general curriculum, entrance age, leaving age, quality of staff, and numbers both of staff and boys, as may be agreed upon by the Central Authority [after careful consultation, renewed periodically with the best active Schoolmasters convened in Council for the purpose‡] as being the most fitted to achieve the

* Hence it never happens in Switzerland that a schoolmaster in a school of 120 boys is under the painful necessity of "knocking his time-table about" to suit the necessities of some fifty or sixty of his boys, who are going in for some ten or twelve different examinations, with different subjects and different "set books" in each, as actually happens by no means infrequently in England.

† Dr. Gow, of Nottingham, has, however, given a lucid exposition of such a system in a paper published in "Education" of February 12, 1898, and in a chapter in "Essays on Secondary Education," edited by C. Cookson, published by the Clarendon Press, 1898.

‡ Compare the Advisory Council recommended by the Royal Commission on Secondary Education in 1895, and for details of its counterpart in Switzerland see pages 26 *seq.* below.

objects for which the school is established and to make it efficient in that particular sphere of educational supply for which the local Authority created and maintains it.

The relation of freedom to Authority.

We are thus at once driven to consider the nature of these two controls, the one carrying the freedom of individual initiative and of local effort, essential to a free democracy, the other maintaining the firm central control and guidance of an aristocracy of brains,—picked men of educational (as well as of administrative) knowledge, wisdom and experience, chosen as such by the democracy for this express purpose, and invested accordingly with the supreme power over public education, as absolutely, and for the very same reasons, as we have long since learned to consider necessary in the case of Foreign Affairs and National Defence. In fact anyone going to Switzerland imbued with the apparently ineradicable English idea that it is essential to modern democratic developments of education that every individual, every locality, should be absolutely free and unrestrained as to the type and method of education which he or it will supply and the lines that each school shall follow, will hear with surprise the most democratic of Swiss educationists, when talking of school matters, referring quite naturally to the restrictions of "the State" [meaning thereby the Cantonal Authority] in just the same words, and attributing to it precisely the same right of control as we are accustomed to associate with a German bureaucratic educational system and to repudiate as impossible in any truly democratic country.* The Swiss, in fact, feel very strongly that this central control is the very first essential to the permanent existence of a democratic State in competition with the highly organised and skilfully directed forces of the more despotically governed countries; and that, without this "control by knowledge" in the sphere of public education *of all grades* just as in other spheres of national life, a democratic State must inevitably be beaten in the international struggle for existence, conquered from without by the force of the concentrated directing brain power of competing nations, and shattered from within by the centrifugal forces of her own people's unrestrained individualism.

Comparison with English practice.

Rationale of the need for central control.

* Compare Matthew Arnold's description of what he considered an Englishman's ideas to be in this respect:—"He has no idea of a *State*, of the nation in its collective and corporate character, controlling, as Government, the free swing of this or of that one of its members in the name of the higher reason of all of them, his own as well as that of others." . . . "How are we to get our *State*, summing up the right reason of the community, and giving effect to it, as circumstances may require, with vigour?" . . . "We can as little find in the working class as in the aristocratic or in the middle class our much wanted source of authority, as culture suggests it to us. Well then what if we tried to rise above the idea of class to the idea of the whole community, *the State*, and to find our centre of light and of authority there? Every one of us has the idea of country as a sentiment: hardly any one of us has the idea of *the State* as a working power. And why? Because we habitually live in our ordinary selves, which do not carry us beyond the ideas and wishes of the class to which we happen to belong. And we are all afraid of giving to the State too much power, because we only conceive of the State as something equivalent to the class in occupation of the executive Government, and are afraid of that class abusing power to its own purposes." . . . "Our best self, our right reason, . . . knows that it *must* establish *the State*, the organ of our collective best self, of our national right reason."—"Culture and Anarchy," 1869.

III.

THE CANTON AND THE COMMUNE IN RELATION TO EDUCATION.

The Organisation of the Central and the Local Authorities.

Organisation of Central and of Local Authorities.

At this point it is desirable to investigate what is the precise nature of this Central Cantonal control. Its actual form varies in the different Cantons; there being three main varieties, as distinguished by competent Swiss observers.*

Various types.

(*i.*) An Education Council, with definite powers, as in Uri, Obwalden, Nidwalden and Zug. In the first three of these Cantons the Education Council is appointed by the Legislature, in Zug by the Executive Council of State. In all of them except Uri the Education Council is subordinate to the State Executive.

(*ii.*) An Education Ministry simply: that is to say one of the members of the Cantonal Executive Council (usually nine in number) is constituted the Education Authority, with the title of Director of Education, having under him such permanent staff as he may require. This is the case in Bern, Glarus, Bâle Campagne, Thurgau, and Vaud.

(*iii.*) An Education Department as in (*ii.*), but with a permanent Education Council attached to it, of which the Head of the Department is ex-officio President. In this category may be included the remaining sixteen Cantons.

(a) Centralised system.

The fact that the first of these categories is composed mainly of the smallest and most mountainous Cantons, makes it unnecessary to dwell here upon its special features. Of the second category Bern Canton is the most typical example; it is also one of the most efficient and highly organised, educationally, in all Switzerland, considering the large rural areas and difficult mountainous districts for which it has to make provision. It is, in fact, the archetype of the more centralised form of educational organisation. Its inspectorial staff is specially strong, and in many other ways Bern Canton reserves in the hands of its

* Compare Dr. Huber, Dr. Schanz, and Dr. Dietrich; vide Bibliography, Appendix G., page 82, below.

Its use of professional conference and advice.

Its use of professional and local opinion.

The Education Council.

Central Authority a very high degree of power.* But, none the less, in Bern Canton, as in all other cases, the best educational opinion of persons actively engaged in teaching is constantly called in; this is, indeed, the invariable condition preceding any important change in educational requirements. This is effected in Bern Canton by organised and *officially recognised* Teachers' Conferences, in which members of *all* branches of the profession take part, and at which the Inspectors of the Department are always present. I had the great advantage of attending one of these Conferences convened at Délémont, for the teaching profession of the Jura portion of Bern Canton to consider a Government proposal to establish a Training College with an "internat," in a particular town; a counter proposal having been submitted by some of the younger Primary Teachers that a Day Training College would be preferable. It was highly instructive of Swiss methods to hear the admirable manner in which the Cantonal Chief Inspector of Secondary Schools opened the subject, and explained the purpose of the Department's suggestion, and its bearing on general Cantonal needs, as distinct from mere local considerations; he drew out, in masterly and lucid fashion, the ground principles underlying the question of "internat" and "externat," and appealed brilliantly to the great weight of English attachment to boarding schools, and to our belief in the strength and independence of character, the vitalising manly virtues and the spirit of solidarity resulting therefrom. The subsequent speeches of some of the leading head- and assistant-masters, of Secondary Schools and Primary Schools alike, as also of Training Colleges, sufficiently showed the solidarity of the whole teaching profession, the Inspectorate and the Education Department,† and the manner in which practical knowledge was brought to bear upon theoretical principles, and the Government thus provided with the best means for arriving at the wisest arrangements in the interests of education and of the whole Canton at large. Similarly, in the matter of the curriculum required in State-aided Schools, our English fears that Central Control in this matter *must* involve (especially in the higher schools), an over-uniformity, and all the evils of over-centralisation—the atrophy of individual experiment and initiative, and the deadening influences of dry bureaucracy—may surely lessen when one sees in highly centralised systems like Bern the active part played by the Education Council or

* It should be added that much anxiety is being shown in some quarters, especially amongst the Primary Teachers, to increase decentralisation, with a view to lessening this central control; but this pressure is being withstood, it is said, in the interests of maintaining a high standard of education, especially in the secondary and higher schools, which it is necessary to safeguard against the effects of a too great predominance of those methods, aims, and criteria, which are necessarily, and indeed rightly, characteristic of the primary schools, but are not equally applicable in the sphere of secondary education.

† All the Inspectors have necessarily been teachers previously for several years, in secondary schools, and in training colleges, and sometimes in primary schools, in addition to having had considerable University experience, and the responsible officials of the Department have also previously been prominent heads of schools with wide inspectorial experience of the practical side of education of all grades.

the Schul Synode (as the case may be), both in presenting to the Department practical and effective opinions on proposed State requirements, and in initiating discussion of new possibilities and changes of existing regulations, and bringing them into effective consideration.

Bern system of Central Authorities.

The actual form of the educational organisation of Bern Canton was settled by the law of 1856, which says (Art. 14):— "The ultimate control of all places of public education is in the "hands of the Directorate of Education; while to facilitate its "task and to serve as intermediaries between the Directorate and "the various schools and establishments (except the University) "there are established Inspectors." The Directorate of Education is the Cantonal Education Department, of which the Head or Director is one of the seven members of the Executive Council of State. He is assisted by a small but educationally experienced and able staff, and is the controlling authority of the Inspectorate, and the framer of the Annual Educational Budget. He controls every grade of education alike, except the University.

The local control of schools is as follows:—

Bern system of Local Authorities.

(*a*) For the Primary School, every Communal Council nominates a School Board of at least five members every four years (teachers and their near relations not eligible). Communes possessing several arrondissements may have a separate School Board for each. These *ad hoc* authorities do not have the decision of the amount of public money which is to be devoted to school purposes; their function is to spend for the good of the school such money as is provided for them by the General Communal Authority for Local Government—the limits of expenditure being fixed by the latter, but not the methods.

Local Authorities for each grade of school.

(*b*) For the purpose of the District Schools [Sekundar-Schulen]* several Communes combine, and a Commission is appointed for each school, consisting of at least five members, chosen in part by the various Communal Councils who have combined to establish and maintain the School, and in part by the Central Education Department, who also nominates the President. The proportion between these two sections is fixed by the Education Department, and depends partly upon the share of expense borne by the combined Communes and by the Canton respectively.

(*c*) For each of the Middle or Higher Schools, which we should call Secondary Schools (they are usually Cantonal, not Communal), there is a Commission of from five to eight

* The Swiss term Sekundar Schule corresponds more or less closely to the French Ecole Primaire Supérieure; they are three year or four year schools, commencing at the age of 11 or 12. It is not coextensive with our term Secondary Schools. The latter are represented in Switzerland more by the term Mittelschulen or Ecoles Moyennes. To avoid confusion, the term Secondary is used throughout this Memorandum in the higher sense only, as connoting all higher schools of a true secondary character up to the stage next before entrance to the University.

members, nominated wholly by the Education Department, the funds being provided mainly by the latter.*

Furthermore, Article 21 says:—"The curriculum and the "methods of instruction in all public schools are laid down by "the Education Department, with the concurrence of the "consultative authorities required by the law, and also, in the case "of the Higher Secondary Schools, of their respective Com-"missions." And Article 24 runs:—"No one may devote himself "to giving private instruction, or establish a private school, "without the authorisation of the Director of Education, which "will only be granted with the concurrence of the School "Inspectors for the district."

Retention Central control.

In every respect, in fact, both local initiative and central guidance and control are alike preserved, and one certainly feels, in every part of the Canton, how the educational experience of the whole as concentrated in the central authority, and the needs of the whole as therein interpreted and safeguarded, continually permeate through every portion of the system as locally administered.†

(b) A less Centralised system.

But if Bern Canton is an admirable example of a strong and well-worked central authority, Zurich Canton may be taken as the most marked example of the reverse tendency. It belongs to category (*iii*) in the above list. Its actual organisation for educational purposes may be interesting as a contrast to the more centralised system of Bern Canton.

The Central Department of Zurich Canton.

At the head of the Educational Administration of Zurich stands, as in Bern, one member of the Cantonal Executive Council of seven‡; who is called Erziehungs Direktor. To him is attached an Erziehungsrath or Education Council, numbering seven members (including himself), of which he is ex-officio President. Four of these members are nominated by the Cantonal Council of State§ the other two by the Schulsynode (or whole profession of Teachers) with the sanction of the Cantonal Council; one being chosen as representative of the Volkschul Teachers,¶ the other of the middle or higher schools and University teachers. Their term of office is three years, renewable. To this Erziehungsrath is committed "the supervision of the "whole school organisation of the Canton; the furthering of "scientific and higher knowledge equally with the Volks-bildung." (Art. 6, Law of 1859.)

An Education Council.

[The Erziehungs Direktor also convenes an annual or bi-annual conference with the representatives of the "District

* Paragraph (c) is not strictly true of the Secondary Schools in Bern Canton, as for certain historical reasons Bern City retains a considerable control over its Gymnasium, and supplies the greater part of its cost, the Canton paying half the salaries in the other Secondary Schools. The above is, however, the normal arrangement in Cantons of this type.

† The provision and the subdivision of local and of Cantonal funds respectively will be explained when we deal, later on, with the whole question of educational finance.

‡ The seven members are responsible respectively for—Justice and Police, Finance, Interior, Military matters and Prisons, Public Instruction, Public Works and Sanitation, and Poor Law.

§ *I.e.*, the Grosse Rat or Cantonal Parliament of some hundred members, of which the before-mentioned Regierungsrat of seven members is the Executive.

¶ Including the Primary, and the Higher Primary or District Schools.

Authorities for Education" (hereafter described) on various educational questions.]

Centrally appointed Commission for each higher secondary school.

It is this Central Erziehungsrat who submit the names of persons (from a list of nominees of the Erziehungsdirektor) to the Executive Council of State for nomination upon the various Commissions which respectively have direct responsibility over the Gymnasium, the Middle Schools, the Higher Schools, the Technical Institutes, and the Training Colleges, all of which are *Cantonal* Institutions. The Erziehungsdirektor may be a member of each of these; when he declines, the Erziehungsrath nominates one member from its own number. So much for the Central Authority, of which the head is a member, as we have seen, of the Executive Council of State, and thus an integral factor of the ordinary Cantonal Government. But when we come to the Local Authority we are met with a different principle from that in Bern, where education and ordinary local government follow the same lines. In Zurich Canton the local Educational Authorities and the Educational areas are distinct from the authorities and areas for other purposes of government.

Zurich Local Authorities.

(i.) The Provincial Authority.

The whole Canton is divided, for educational purposes, into eleven education districts (Schul Bezirk), each of which has a "District Education Authority" (Bezirkschulpflege) of nine to thirteen members, three chosen by the whole teaching body of the district, the rest by the non-teaching residents; the term of office is three years, once renewable. This Provincial Authority has the general oversight of the whole school organisation of its area in all its grades. Its members must divide amongst themselves the visitation of all the schools in the district. This Bezirkschulpflege has indeed most important functions; it is responsible for compulsory school attendance, and for the good conduct of all schools. The general oversight of their finance is in the hands of the Bezirksrat (Provincial Authority for Local Government) which has the duty of examining and approving the accounts of all the Communes within its area. To the Provincial Education Authority are delegated in Zurich many of the responsibilities which in Bern Canton are reserved to the Central Cantonal Authority.

(ii.) The District Authority.

Again, each Bezirk or Province is divided into circles, each of which possesses one District School or Sekundar Schule*—into as many circles, in fact, as there are Sekundar or District Schools. These districts are fixed from time to time by the Cantonal Executive Council, and, under the law of 1859, are never to exceed sixty for the whole Canton.† Each Sekundar Schulkreis has its own Pflege of seven to eleven members; two chosen

* The nature of these schools and the difference between them and what we should call Secondary Schools is explained in the footnote on page 27.

† The intention of this limitation was to avoid over-competition, over-supply, and unnecessary overlapping, of educational efforts under public funds; on the principle that the best results are obtained, not from unlimited rivalry and competing for pupils, but by *concentration* of the best available talent and all available funds in certain centres, chosen as the most suitable place after consideration of the various points which must be kept in view, for the good of the whole area.

by the District Authority and the rest by the Primary School Authorities of all the Communes which are contained within the Sekundar Schulkreis*. The number to be sent by each Commune is fixed by the District Authority in proportion to the population and to their requirements in each case. Their tenure of office is four years. [Teachers may be called to attend for consultative purposes.] They have a Schulverwalter or Administrator, and they must submit a detailed report annually to the Provincial Local Government Authority (Bezirksrat) above referred to. The portion of the expense of the Sekundar or District School not met by cantonal grants or endowments is divided amongst the constituent Communes (and met from their Communal rates), according to population and their use of the school, by the decision of the Central Authority, on the proposal of the Provincial Authority.

(iii.) The Communal Authority.

Finally, each of these circles [Sek. Schulkreis] is composed of many Communes,* each of which has its own Primary School, with its own Gemeinde Schul-Pflege or Communal School Authority, composed of at least four members, elected by the inhabitants: teachers may be called in for consultative purposes. In regard to this last unit of authority, the Commune or Gemeinde, it usually happens that the School Commune is identical in area and in membership with the ordinary Commune of local government: but the notion of a separate organ for education is still maintained in Zurich Canton, and the inhabitants both elect their authorities and levy and pay their taxes, for school purposes, separately from those for the other purposes of local government. This is also the case in S. Gallen Canton.†

Defects of an over-decentralisation of supervision.

But with this highly organised scheme of local authorities, for each grade of education, there is one point in which Zurich Canton is behind the rest of Switzerland. Curiously enough this Canton, so renowned in Europe for its educational arrangements (a renown resting undoubtedly on the excellence of its city arrangements, more than on its rural education) possesses actually no Cantonal Staff of Inspectors. The Central Supervision of distant districts is almost nominal, the individual schools being merely supervised and occasionally inspected by the above-described local Commissions, which are often composed largely of ordinary private individuals with little or no expert knowledge or advice. The effects of this license are, in the opinion of many men engaged in active teaching, not good in regard to the Cantonal education as a whole.‡ But the city of Zurich is itself so highly centralised, so wealthy, so devoted to public education, and so predominant over the rest of the Canton (both in repute and in fact), that the educational shortcomings of the Cantonal System are overlooked in the general admiration of the magnificent educational arrangements of the metropolis. Many leading educationalists, however, specially the heads of the larger or district schools to

* For recent changes upon this point, see note at the end of this chapter, page 32.

† This point will be considered elsewhere under the question of Religious Arrangements in Swiss Education, and it will also arise in considering the Finance of Education in Switzerland.

‡ See note at the close of this chapter.

which scholars come from outlying districts, do not agree with the official optimistic view of the Zurich system; they speak unfavourably of the varying standards, the frequently slack work and poor results, arising from the absence of that Central Supervision, that requirement of a general standard, which prevails in most other Cantons, where cantonal delegation of authority has not been carried to such excess, and where Inspection is kept in the hands of men with expert knowledge and experience.

(c) General principles.

To sum up our conclusions as to Central and Local Authorities, it is clear that, as a rule in Switzerland, the whole educational system of a Canton is systematically organised throughout, being (*a*) worked in all details of *direct* management by the nearest possible *local* authority; (*b*) controlled in its general aims and effects, and brought up to the proper standard, by the higher authority of a large district, near enough to be able to gauge local circumstances, yet far enough to be free from undue local partialities*; and (*c*), last, but not least, supervised, guided, and aided by the Supreme Central Authority, which itself possesses both expert advisers and means of local knowledge:—while at the same time, each school is recognised as drawing its clientèle from, and providing for the needs of, a clearly defined area:† the area increasing in size for each grade of school, from the primary school in each little Commune, and the district school in a circle of several Communes, to the Gymnasium and Real-Gymnasium providing for the whole Canton. Is it not at once clear that the organic connection of each grade of school with that which educationally precedes it, may thus well be in Switzerland an actual fact, not merely a theory? And that a people possessing a system of schools of this nature are in an infinitely better position for developing the capacities of every individual citizen, in every corner of the Canton, than can possibly be the case under our English lack of system; where not only are local authorities for each different grade of education usually either non-existent or else lacking in co-ordination of effort, but even the Central Authority has wholly separate branches for some grades of schools, and absolutely no department at all for others.

(d) Contrast with our English chaos.

But, after all, it may be said, the most highly organised systems are of no use without money; and in a reputedly poor country like Switzerland, it would be of interest to know in what way these various authorities are provided with funds to carry out the educational schemes which they are in such an excellent position not only to devise but also to control. We shall, therefore, next turn our attention to the Swiss system, or rather systems, of educational finance, since it is in its financial arrangements that a thorough educational organisation finds its

* For instance, in the matter of compulsory attendance at school.

† The map in Appendix C will show very clearly the great care taken in planning out the provision of *each* grade and type of educational supply for each area.

clearest expression, as well as its most effective means of influence.

NOTE.—Since the foregoing chapter was printed it has been submitted to a responsible official of the Cantonal Education Department in Zurich, in order that no unjustifiable impression should be made from a too rapid generalisation. I think I cannot do better than reproduce his criticisms here, in translation.

"The Zurich school law of 1859, which you here quote, has been somewhat modified. It would be more correct to substitute the following for the second and third paragraphs on page 29—'Each of these eleven bezirks or provinces is divided into circles or districts (schul-kreise) for educational administration and provision, both primar schul-kreise and sekundar schul-kreise. In many cases these coincide in area. But as a rule a sekundar schul-kreis contains several primar schul-kreise. Each sekundar school is maintained by all the inhabitants of its kreis, who rate themselves for this purpose. Each kreis has its own authority, the sekundar schul-pflege, of 7 to 11 members, elected for this purpose by ballot by all the inhabitants of the kreis *ad hoc*. Their tenure of office is 3 years. Under the law of 1859 the number of these sekundar schul-kreise in Zurich canton was limited to 60; but owing to the great increase of the population, to industrial developments, and to the rise in educational standards, the limit has been exceeded, under a revision of the law, and the number is now 91. Finally there are the primar schul-kreise (at present 179 in number in the whole canton, including the town of Zurich, which, with its suburbs, forms one schul-kreis). The primar schul-kreis has for its general deliberations an assembly of all the inhabitants; it may comprise either one or several primarschulgemeinde (communes). Each primary school commune has its own authority, gemeinde schul-pflege, which directly manages the primary school or schools of the schul gemeinde, and rates the inhabitants who compose the gemeinde, for this purpose." [*It also receives grants from the central cantonal authority; there is, in fact, in Zurich canton a complete system of educational areas, authorities, and rating bodies, alongside of, independent of, and not always coincident in boundaries with, the ordinary divisions for other purposes of local government. R. L. M.*].

"I cannot wholly agree with your strictures on public education in Zurich. I admit that the city with its 150,000 inhabitants has deservedly earned a conspicuous place. But I believe that, thanks to our admirable body of teachers, the schools of our country districts, with their 300,000 inhabitants, are on the same level (ebenwürdig). As regards our lack of expert inspection (Fach inspectorat), I agree with you to a certain extent. Yet I must maintain that our bezirk-schulpflege, to whom we leave our inspection, are, as a rule, composed of the most cultured people in each area, doctors, clergy, teachers, business men, successful agriculturists, and so forth, who make it a point of honour to conduct their inspection, not as a mere form, but in serious earnest, and at least twice in each year for each school. Thus you will see that with us the whole development of things is in the direction of giving the last word in all things to the people. Many of the powers reserved by the law of 1859 to specific or expert authorities have in the course of years been handed over to the Volk. That is the tendency of the age: for myself I rejoice thereat!" [*I have thought it best to reproduce this criticism in full, and would draw attention to the closing sentence which sheds so clear a light on all the rest. This view of educational politics is characteristic of many minds in Zurich (Zurich City is perhaps the chief centre of Swiss Socialistic developments), but it is in striking contrast to the views most keenly held by other large cantons, e.g., Bern, Vaud, St. Gallen, Valais, etc., where the retention of expert central control is firmly believed in. R. L. M.*].

IV.

FINANCIAL ORGANISATION OF EDUCATION.

1.—Principles of Grants.

On the Financial side of education, as in all others, there is every variety of form in the Swiss arrangements. But it may be well to state at the outset that there are two points which are invariably true in each and every Canton, for every grade of education. *First*, practically the whole of public education is provided for from the public purse; the funds required in the case of each school being drawn from a larger or smaller area in direct proportion to the larger or smaller area of population which is served by the school: a consideration which receives the fullest attention through every stage of the school's career, as well as its inception. And *Secondly*, all Grants* are plainly recognised to be simply the machinery for devolving upon broader shoulders a definite share of the total expenses necessarily incurred by each school in providing good educational results for its scholars; and where these good results are hard of attainment, this is held to be a reason for increasing the grant not for decreasing it. Hence there is not a single form of Grant—Communal, Provincial, Cantonal, or Federal—in all Switzerland, which is in any way dependent directly upon the number of pupils in the school, (still less upon the number who pass a particular examination), or which directly varies with the good or bad attendance of the scholars, or which recognises payment by results, or varies with results, in any form whatever.

1. Principles of grants.

Two universal principles.

Practically the Financial System has four main constituents:— (i.) the Commune; (ii.) the District, *i.e.*, the Combination of all Communes within a certain area; (iii.) the Canton as a whole; and (iv.) the Federation or Bund, which is now taking an increasing share of the burdens of educational expenditure, but usually without exercising any direct control.

Four component parts of the Financial system.

Broadly speaking, one may say that, taking the various grades of education in descending order, the distribution of educational finance is as follows—(*a*) the very highest form of Scientific and Technical Professional Training (always the most costly of all forms of instruction, both on account of the nicety of the apparatus required and the constantly changing developments of scientific requirements) is provided wholly by the largest conglomeration, the Bund as a whole.† (*b*) University Education is provided wholly from Cantonal funds, since the

Principles of allotment of the various grades of education.

* It is really somewhat misleading to use here this usual English term for State (as distinct from local) expenditure; its use tends to obscure the true nature of the principles of sound educational finance as understood in Switzerland.

† This is given in the Federal Polytechnic in Zurich City. The Canton of Zurich and the city of Zurich voluntarily make a certain contribution to it, but the Institution is Federal and under Federal control.

University, to be real, must be an outcome of national life and sentiments and aspiration, and in Switzerland the Canton is the nation. (*c*) Secondary Education in the higher English sense, *i.e.*, Gymnasien, Real Gymnasien, Higher Commercial Schools, Higher Real Schulen, and General Higher Schools, are provided almost wholly from Cantonal funds, because one higher Secondary School of each type is usually sufficient for the needs of each Canton. Sometimes the town where the School or College is situated contributes a share of the cost, on the grounds that it can make a greater and easier use of the advantages of the institution than can other places. (*d*) Technical Institutions of what we may call University College rank are also Cantonal, though the locality contributes more largely than in the case of the Secondary Schools, because of the more direct and exclusive interest of the locality in the particular branch of technology which each institute respectively seeks to supply. (*e*) Technical Institutes of a lower rank are usually maintained wholly by the locality (generally a town) which more exclusively requires the instruction provided by it, while Agricultural Institutes are mainly Cantonal because of the large area which they serve, but are aided by the locality because of the great advantages accruing to it therefrom.* (*f*) While the Volkschulwesen, *i.e.*, the Volkschule of the Commune and the Hohere Volkschule or District School of several Communes combined, in other words the whole of Primary, Higher Primary, and what used to be called third grade Secondary Education, is provided from Communal funds supplemented up to a fixed proportion of the total cost by the regular participation of the Canton.†

The Commune.

It is indeed a cardinal point in the whole history and theory of Swiss Education that the first nucleus of effort and of expenditure in regard to the primary school is, and has always been, the Commune or Civil parish. From the very earliest days we find individual Communes making great efforts to provide education for the children within their borders. Thus, for example, it seemed but a natural development of already existing principles for the Bern Cantonal Government to issue an order on April 12, 1615, of which the following is the third paragraph:—

> With this object we command that in every place where it seems requisite, there shall be placed teachers, reformed and virtuous men, who shall be maintained by each Commune, either by Communal Taxes, or, in the case of poor Communes, by means of the property of the Church; and that strict account be rendered as to the expenditure of these monies, &c.

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* (*c*) (*d*) and (*e*) are aided by the Federation or Bund, which provides a regular annual contribution towards Technical, Commercial, and Agricultural Education of all grades. This will be explained later. The contribution is a lump annual grant not calculated *per capita*, and is administered not by the Education Departments, but by the Ministers of Commerce and Industry.

† The arrangements of this Cantonal participation will be explained later. A Federal grant to Primary Schools has been for a long time urgently demanded, and may be said to be at last within measurable distance of accomplishment, now that all the Cantonal Administrations are said to have agreed, both upon the principle and upon the basis for allotting the grant. It will not bring with it any form of Federal inspection or control, Cantonal independence being strictly reserved in this respect, the object of the grant being rather an equalisation of financial burdens than a leverage for federal control.

And in 1675 a rule was issued that "Schools are to be established "in *all* parishes: the Communes are to buy or construct or rent "certain premises for the school." After a time it became the general practice to establish regular Schul-Fonds or Schulgut, i.e., a permanent Capital Fund, in each Commune, for the upkeep of the school. The Fund was made up by annual drafts from various fixed communal fees and other local incomings, *e.g.*, birth fees, marriage fees, citizenship fees, market dues, certain indirect taxes, court fines, etc., etc. It was also the object of constant donations, legacies, perpetual endowments, etc., etc.; and it became a frequent thing for people to leave a large portion of their property to the Communal School Fund.* In this way we find substantial sums annually available for the Volksschule in some places, and a strong feeling of local pride attaching to the wealth and well-being of the School as much as of the Commune itself.† It is stated by Dr. Huber (the greatest living authority on Swiss Educational Statistics) that the various Communal School Funds now existing in every part of Switzerland (counting Primary Schools only), when added together, reach a capital value of 58 millions of francs; an amount which, if existing in England in the same proportion to the total population, would, at 3 per cent., provide an income of some seven hundred thousand pounds sterling per annum for our Primary Schools. And besides these Communal Capital Funds twelve of the Cantons possess a permanent *Cantonal* Fund solely for Volksschul purposes; the total of which amounts to nearly £400,000.

The School Funds.

But the cost of efficient Primary Education, of course, greatly exceeds the scope of these Permanent School Funds; and of this expenditure, which originally fell wholly on the Commune, the Canton has taken over a constantly increasing share. For, as Professor Schanz says,‡ "The greater the efforts made by the small Communes to increase the work and results of their school, the sooner they came to the limits of their financial possibilities, and so much the more strongly had the larger social area to intervene, and take on itself an ever larger share of the burden." Moreover, this tendency was immensely increased

Finance of Primary Education.

Gradually increased participation of Central Authority.

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* Thus in Bern City there is now a Permanent Capital Fund—

	£
for the Primary Schools of ...	27,268
for Boys' Sekundar Schulen of ...	1,256
for Girls' " " " ...	1,784
for the Gymnasium of	1,412
Total . .	£31,720

And this increases by more than £1,000 each year.

† To this there is an interesting parallel in our English developments of old days: thus Dr. Jessopp says of the ecclesiastical parishes, in the *Nineteenth Century* for January, 1898:—"The property belonging to the parishes during the centuries before the great spoliation was enormous, and was always growing. It consisted of houses and lands, of flocks and herds, &c., &c. . . . This property was perpetually being increased by legacies, everyone who died leaving something to the parish. The parish was, in fact, the centre of the popular life."

‡ *Die Steuer der Schweiz*, Vol. I., p. 298.

throughout the whole of Switzerland from the middle of 1870, when the New Federal Law introduced compulsion and laid it down, in Article 27, that "The Cantons must take measures for an adequate Primary Instruction, which is to be compulsory and, in the public schools, gratuitous." For, obviously, both the universalizing of compulsory schooling, and the abolition of school-fees at once entailed a larger expenditure of public funds; especially as the same Act abolished compulsory marriage fees, which had usually been handed over to the chest of the School Capital Fund; so that in this respect also a larger public outlay was involved. Thus this double burdening of the Communes led everywhere to an increase in the amount of aid necessary from the State, *i.e.*, from the Canton; and this process has steadily continued, until, at the present day, taking Switzerland as a whole, out of the total expenditure on Primary Education the Communes only pay about two-thirds, the remaining third being provided by the Cantons. The actual apportionment, however, varies very greatly in the different Cantons. According to the latest figures the share of the Canton varies from 74 per cent. of the whole expenditure in the highly centralised system of Geneva Canton (which follows the French model in many respects), to 34 per cent. in the normal Canton of Bern, and 6 per cent. in the highly decentralised Canton of Schwyz. The figures given on the following page have been carefully calculated from various publications issued by the great Swiss Federal Statistician and Educationalist Dr. Huber. They give the principal details in regard to Primary Education, exclusive of expenditure on buildings, in Switzerland and in England in 1894. Any comparison of the English figures with the Swiss must be made with great caution, and with due regard to all the points named in the footnotes below the table.

Three Principles of Central participation in Expenditure.

There are, moreover, as Professor Schanz also shows, as many differences regarding the method of actually calculating the Cantonal Grant to, or share in, Primary Education Expenditure, as there are in the eventual amount of the burden. These differences fall into three main categories, thus:—

(*a.*) Some Cantons emphasise the principle of making the Cantonal Grant simply an absolute proportion of the total expense incurred; this is the method in Zug, Schwyz, Bâle Campagne, and Geneva.

(*b.*) Others calculate the Cantonal Grant in proportion to the greater or less local poverty and need for central aid, as Solothurn, S. Gallen, Glarus, Thurgau, and Aargau.

(*c.*) Others again, and these the majority, have a mixed basis, embodying both the foregoing considerations. This is the case in (1) Bern, Vaud, Lucern, and Grisons, all of which specially emphasise the (*a*) principle of absolute proportion; while (2) in Fribourg, Neuchatel, Tessin, and Zurich, the proportion of participation is more largely affected by consideration for the greater or less necessitousness of each particular Commune, as shown in (*b*).

STATISTICS OF SWISS AND ENGLISH PRIMARY EDUCATION IN 1894.

The German name of each Canton is used here and elsewhere, except in cases where the French name is more generally used by English people.

Name of Canton.	Area in Acres.	Population at Last Census in 1888.	Number of Children in Primary Schools.	Total Expenditure from all sources on Primary Education, excluding Buildings.					Approximate Percentage of Cost borne by	
				Per Child in the Schools.		Per head of the Population.		Total.	Commune.	State, i.e. Canton.
				s.	d.	s.	d.	£	%	%
Zurich	425,828	339,014	56,650*	†75	10	†12	8	†214,895	†71	29
Bern	1,701,583	539,305	99,385	28	6	5	4	141,351	66	34
Lucern	370,500	135,780	19,680	27	5	3	11	27,046	58	42
Uri	265,772	17,284	2,933	18	7	3	1	2,723	79	21
Schwyz	224,276	50,396	7,078	22	8	3	1	8,034	94	6
Obwalden	118,313	15,032	2,322	18	2	2	9	2,104	89	11
Nidwalden	71,877	12,524	1,840	23	9	3	5	2,154	80	20
Glarus	170,677	33,800	5,235	62	11	9	9	16,455	84	16
Zug	59,033	23,120	3,218	37	9	5	4	6,091	80	20
Fribourg	412,243	119,562	19,950	18	8	3	2	18,690	72	28
Solothurn	193,401	85,720	14,079	39	6	6	5	27,834	75	25
Basel Stadt	8,892	74,247	6,607	‡125	6	11	4	41,487	—	100‡
Basel Land	104,234	62,133	10,845	22	2	3	9	12,029	52	48
Schaffhausen	72,618	37,876	6,393	57	6	9	9	18,396	57	43
Appenzell, A.R.	64,467	54,200	9,659	21	1	3	9	10,190	92	8
Appenzell, I.R.	39,273	12,906	2,115	22	4	3	8	2,364	59	41
St. Gallen	553,206	229,441	35,697	62	3	9	4	110,443	89	11
Grisons	1,968,416	96,291	14,482	23	2	3	6	16,828	67	23
Aargau	346,788	193,834	30,009	37	0	5	8	55,693	73	27
Thurgau	244,036	105,091	17,366	49	4	8	2	42,729	87	13
Tessin (Ticino)	696,046	127,148	17,764	20	8	2	10	18,228	77	23
Vaud	882,828	251,296	40,953	33	0	5	5	67,674	67	33
Valais	1,296,009	101,837	21,306	11	6	2	5	12,209	93	7
Neuchâtel	199,329	109,037	17,281	44	8	7	3	38,690	66	34
Geneva	68,913	106,738	8,871	§77	8	6	6	34,445	26	74
				s.	d.	s.	d.			
All Switzerland as a whole	10,223,083	2,933,612	471,723	40	3	6	6	£948,779	69	31
		1891.		s.	d.	s.	d.		Localities	State.
England & Wales	32,595,312	29,002,525	4,425,834	55	6	8	1	£11,733,394	43·3	56·7

NOTE.—Administration and inspection are included both in the Swiss and English figures. The English figures include most of our expenditure on Training Colleges, which the Swiss do not. Building expenditure is for the most part excluded in both sets of figures. *Vide* Special Reports on Educational Subjects, 1896-7, C.8447, page 32, excluding columns *f* and *g*. On the other hand, the Swiss expenditure given above provides for the Primary education of all classes of Society, not for a portion only as in England. It must be remembered that part of the above local expenditure in Switzerland is met from the Permanent Capital Funds of the Schools; it does not wholly fall upon annual rates. These Funds are greater in proportion to the whole expenditure than are the endowments of English Elementary Schools. Both in Switzerland and in England the building expenditure (which is excluded from this table, except the minor repairs) falls mainly upon local funds. Voluntary contributions are included in this table; they are a very small item in Switzerland.

* The number of children in the Primary Schools is largely affected by the age at which the Continuation Schools and Secondary Schools may be entered in each Canton. This varies greatly.

† The high average expenditure in Zurich Canton is largely due to the great outlay in Zurich City, where the City Authorities have shown strong Socialistic tendencies in many directions, and loud complaints have been raised by ratepayers as to extravagance in school buildings, and as to making all schools, even the highest, quite free. Their school buildings, a small part of which are here included, are specially magnificent and costly.

‡ Baselstadt is practically one large city, but it possesses independent authority as a Canton, or rather half-Canton, and thus the Locality and the State are here one and the same.

§ In Geneva we have a partial explanation of the high figure of expenditure in the fact that the Canton is very small in area compared with the size, importance, and wealth of its capital city, and thus the necessarily high city expenditure (equally obvious in the case of Baselstadt), due to land values and to city requirements has a much greater effect on the average for the whole Canton than is the case in larger Cantons like Bern.

Central grant is towards salaries.

The one point, however, in which all agree is in making the main portion of State participation take the form of *payment to the Local Authorities of a proportion of the teachers' salaries.*

Reasons and advantages of this arrangement.

Schanz praises this on the grounds that there is no doubt that this is always the most effective portion of the total expenditure of a school. The condition and efficiency of the school must, in fact, depend primarily on the question of salaries, since these largely determine the grade of teaching power obtainable; and it is a great point that towards this most important item of expense a reliable and punctual provision is assured, from the central purse, unbiassed, as it is, by local interests and less fettered by temporary embarrassments. It is easy to see that the acceptation of this principle of central aid, viz., the provision of a certain proportion of the expense of salaries, has obviously far-reaching advantages as compared with a grant calculated on the number of children in the school. For instance, under the latter system a small country school with some fifty or sixty children will receive only a sixth of the grant obtained by a town school of 300 children. Now the fifty children have to be taught in at least three separate classes, according to attainments; and though in the town school each one of the staff of six teachers may do very good work with his fifty children [when the 300 are arranged in classes so that all the fifty children in any one class are much on the same level of attainment], it is, on the other hand, obvious that the one teacher in the country school cannot possibly hope to do anything like the same work when dealing with his fifty children, divided up amongst three separate classes, all at once. The small school, in fact, unquestionably needs two additional teachers, and this at once makes the teaching expenditure at least threefold higher, in proportion to the number of children, than that of the larger school. It may be added that the principle of making teachers' salaries the main object of central grants has been frequently enunciated in England, especially during the discussions preceding the 1896 and 1897 Education Bills; but it has usually been held to be impossible of application, as involving the State appointment of teachers, and implying the transformation of all teachers into civil servants. It is interesting, therefore, to find that this is not the case in Switzerland. The central contribution to, or payment of, the salaries is usually made to the local authorities or the school managers, not to the teachers; while the nomination of the latter is left wholly to the local authority; indeed, so far are the teachers from being permanent civil servants, that the appointments are nearly always made by local election, and actually subject to reconsideration and revision by the local authority every six years. So that evidently the plan does not necessarily involve conferring on the teacher the status of civil servant.* Among the incidental advantages

* Moreover it is expressly arranged in most of the Cantonal education systems that it is not *the whole* of the teachers' salaries that is provided from the central Cantonal purse, but only a portion, leaving a certain share to be met by the

of this form of Central aid, as compared with a grant on attendance and on subjects, may be named these facts:—That it is not in Switzerland, as it still is with us, the greatest of all economies in the hands of a parsimonious local authority to cut down the teaching staff; that as the rural school salaries are not kept so hopelessly behind those of the town schools, the country folk have a better chance of getting good teachers; that it does away, at once, with the infinitely cumbersome machinery, at the central office, for calculating and checking the total amount of the central grant on our complex system, besides relieving the teacher from the burden of minute registration of attendances kept with sufficient accuracy to be made the basis of central grants; that managers are not tempted to over-load the school programme with odds and ends of subjects in the effort to "earn a bigger grant"; and the curriculum of the school can be thought out as a complete whole to suit the needs and potentialities of the children in each place, and then required of the teacher in its entirety by the Central Authority; and that no one is ever tempted to look upon each child as a "grant earning unit" to be used for milking the central exchequer*; that the principle of central grants is clearly

locality. And this, I was told, is mainly for two reasons—(*i.*) that it is not consonant with sound finance that too large a portion of the cost of a strictly local need should be wholly devolved upon the central purse, and (*ii.*) because it is believed, from the educational point of view, that under this arrangement a keener interest is felt by the locality in the teacher's work and appointment and good credit than would be the case if he were a wholly State-paid official; in fact, that some amount of hold upon the purse-strings is an essential element in an efficient control.

* That this is the chief aspect in which the code subjects of instruction are regarded by many school managers is clear from the emphasis laid on this point by Sir John Lubbock when urging an extension of the curriculum of our Primary Schools on March 23, 1898, in the House of Commons, and by his frequent use of the word "earned" which implies so curious a view of the relations between State and Locality in this regard. Before enlarging in any way upon the educational advantages of the changes proposed, he pressed the financial aspect upon their attention, as follows:—"If they could induce the Government to alter the English Code so as to put their schools on the same platform as the Scotch—and this was surely a fair claim—their London schools might earn 4*s.* a head more than they do now. At present the Scotch schools earned £1 1*s.* 4*d.* per scholar and the English only 19*s.* 11*d.*—a difference of 1*s.* 5*d.* a head, which is equivalent to a very large sum. If this were due to the greater excellence of Scotch schools—to the children being better taught, more industrious, or more intelligent—they should have no cause to complain; but this was not so. The difference arose from the difference in the condition of the two Codes. Scotch schools were allowed to send in their children for four class subjects and to earn 8*s.*; English schools were limited to two class subjects and could not earn more than 4*s.* That the difference was due to this cause was shown by the fact that the Scotch schools did earn 5*s.* 6*d.* from the class subjects, while the English schools were only able to earn 3*s.* 6½*d.*, or 1*s.* 11½*d.* less. But for this arbitrary difference we should actually earn more per head than the Scotch. In the London schools there were 600,000 children in average attendance, so that 2*s.* a head would come to a good round sum. Surely, then, on financial grounds, they might fairly ask to be placed on the same footing as Scotland." In no portion of his speech did the speaker deal with the essential question of the proportion of the total cost of primary education which should, in principle, fall upon the central as distinct from the local purse. And a precisely similar point of view as regards grant-earning is indicated in a long letter to the *Times* of October 10th, 1898, written by an eminent School Board clerk, who even goes so far as to say that school managers are not likely to teach any higher or more difficult subjects if they can "earn the same amount of grants" by confining their efforts to purely elementary subjects. In the following day's *Times*, on the

understood to be, not a bribe or a reward for getting better work done, but a rational participation of educational burdens on the part of the State; and finally that the educational effects of the school can be the chief concern of the managers, and the progress of the weakest and the strongest child alike can be the chief concern of the teacher, since both parties are assumed by the central authority to be doing their utmost and their best in these directions, and are regularly given a fixed proportion of the necessary means for making this honourable assumption a reality.

We may next go into the particular methods of calculating the Central Grants, in regard to each of our three categories.

(a) Grant based on fixed proportion of expenditure.

(*a*) In Geneva, as representing the first category, in which the basis is a fixed share of the total cost, the Cantonal Grant comprises the sharing of the expense of new buildings and of furniture, up to 50 per cent., and of all teachers' salaries up to 75 per cent. thereof; the providing of the whole cost of substitutes for sick teachers, and the sharing of the cost of kindergartens up to two-thirds. The State also makes an additional contribution in the shape of a progressive bonus paid direct to the teacher for every ten years of service. Such is the system of taking over simply an absolute proportion of the educational burden.

(b) Grant of fixed proportion modified by local necessitousness

(*b*) In Bern, on the other hand, where a fixed proportion of expenditure is somewhat modified by considerations of local poverty, we find that the Canton pays 5 per cent. of the cost of new buildings and of repairs; but this may be raised to 10 per cent. when the Commune is exceptionally necessitous; it pays a fixed annual amount towards every teacher's salary*; it pays one-third of the cost of a substitute for a sick teacher (the Commune and the sick teacher respectively paying the other thirds); and a variable lump sum, settled every two years, towards the total educational expenses of such Communes as are specially necessitous, taking into consideration both their rateable value (with their actual current rate of taxation), and also the expenditure necessary to provide in that locality a good school; while the Canton also sets apart an annual sum for adding to the salaries of teachers who are working in exceptionally necessitous Communes, so that the latter may be enabled to keep a good teacher instead of losing him to Communes which can offer him a higher salary.

This is what we have described as the system of absolute proportion influenced to some degree by the scale of local necessitousness.

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other hand, a different writer practically makes the same comment upon this letter that I have just made in regard to Sir John Lubbock's speech, while urging that the retention of the "seventeen and sixpenny limit" of the grant in Evening Continuation Schools, under § 19 (1) of the Act of 1876, cannot reasonably be criticised as a "prevention of educational developments," seeing that the whole object of the clause in the Act of 1870, of which it is a partial survival, was not an educational but a financial one; for it simply provided the means of maintaining a certain rational and well-defined financial relation between the central and the local shares of public expenditure on local public needs.

		£			£	
* After 1 to 5 years of service		20	for a Master and		14	for a Mistress.
„ 6 to 10	„ „	26	„	„	17	„ „
„ more than 10	„ „	32	„	„	20	„ „

(*c*) Finally, as representing our third category, in which the scale of local necessitousness is held as the *main* factor in determining the absolute proportion of expense borne by the Canton, we find that in Zurich (which we may take as the type), all consideration of the amount of Cantonal participation is based on a certain financial classification of all the Communes. The latter are arranged in ten classes according to their rate of local taxation for all purposes (taking the average of the last five years), *i.e.*, according to their *basis* of rating or Gesammtsteuerfuss, which is explained in the financial chapter below, see pages 49, 50 thus:— (c) Local necessity is main factor in assessing grant.

Financial Class.	Base Scale of the Local Rates, ‰
I.	From 0 to 2 per mille.
II.	„ 2·1 „ 3·5 „
III.	„ 3·6 „ 5 „
IV.	„ 5·1 „ 6·5 „
&c.	etc. etc.
&c.	etc. etc.
IX.	„ 9·6 to 10 „
X.	Over 10 per mille.

And the proportion of the Cantonal participation in the educational expenditure of each locality varies according to what "class" the locality is in, *i.e.*, according to the greater or less severity of its rating.* But it is based on this "financial class" number in a different manner for each of the different purposes held in view; thus:—

(1.) For Teachers' Salaries.—The Canton in all cases pays one-half of the minimum teacher's salary of 1,200 francs, and, in addition to this, a certain proportion of the other half, varying on a fixed scale, according to the "financial class" (as we have called it) of the Commune. The Canton also pays a proportion of any additional salary granted by the Commune beyond the 1,200 francs minimum, varying on a fixed scale, from one-tenth to one-half of the same, according to the "financial class" of the Commune. The Canton also pays direct to the teacher an additional allowance, according to length of service, of from 100 to 400 francs yearly. This does *not* vary with the "financial class."

(2.) For Buildings, etc.—The Commune provides and maintains the school buildings, materials, teacher's house, etc., but the Canton pays a certain proportion of this expenditure varying from 5 per cent. up to as much as 50 per cent. according to the "financial class" to which the Commune belongs; the "financial class" scale being slightly different for this purpose from that given above.

(3.) Communes which provide all teaching materials, books, etc., free to all school children, receive from the Canton a proportion of the expenses thus incurred, which varies from 10 per

* Compare the special grants to necessitous School Boards, under § 97 of the Act of 1870, which were allocated on a similar principle. Similarly the new grant to Voluntary Schools (1897) is to be based on "necessitousness," but no definite method or uniform scale of gauging necessitousness was specified.

cent. in the case of a Commune in "Financial Class" I., to 75 per cent. in Class X. (see table above).

(4.) Besides this, however, certain Communes are considered "specially necessitous," and receive special aid under two heads:*

(*a.*) for ordinary expenditure of maintenance;

(*b.*) for the establishment of a permanent "School Fund."

For both these purposes a Commune is considered "specially necessitous" when the total necessary expenditure of the year exceeds the produce of a local rate based on a scale of 8 per mille.† When this is the case, the Canton gives two grants in aid, which are calculated according to the following scale:—

Average basis of Local Taxation for the past Five Years. ‰	(A) Cantonal Grant for School Maintenance per head of Teaching Staff.	(B) Cantonal Grant proportionate to the Local Contributions towards the School Fund.
	Francs.	
From 8 to 9 per mille.	50	50 per cent. of the Local Contns.
„ 9·1 „ 10 „	100	60 „ „ „ „
„ 10·1 „ 10·5 „	150	70 „ „ „ „
„ 10·6 „ 11 „	200	80 „ „ „ „
Over 11 per mille.	300	90 „ „ „ „

This Zurich system may seem complicated at first sight, but when once it has been running for several years, and the "financial class" of each Commune and the product of a given local rate become fairly known, it works with absolute smoothness and facility.‡ It has at any rate the one very great merit of taking into consideration both the greater cost of doing things in certain localities and also the greater poverty of certain localities as gauged on a simple, rational and unquestionable basis.

System of grants for other grades of education

Such are the three main systems of central contributions to Primary Education. As regards the participation of the Central Authority in the expense of the district schools or Higher Volkschule, or Sekundarschule, corresponding more or less to the Ecole Primaire Supérieure in France, the arrangements in each Canton are generally on similar lines to those which they follow for their Primary School Grants in each case, but a slightly larger share is usually allocated by the Canton than in the case of the Primary Schools, because of the greater cost of the education given in the Sekundarschulen, and the greater need to encourage the creation of these schools, which are not compulsory like the Primary Schools, but are yet highly necessary for the national welfare. The main principle of grant calculation, however, is practically the same in both, viz., a proportion of the actual expenses incurred, especially in the matter of teachers' salaries.

* Compare the special grants to necessitous School Boards, under § 97 of the Act of 1870, which were allocated on a similar principle. Similarly the new grant to Voluntary Schools (1897) is to be based on "necessitousness," but no definite method or uniform scale of gauging necessitousness was specified.

† The meaning of this 8 ‰ scale will be clear after perusing the notes on taxation given below, pages 48–50.

‡ The above description is only an outline of the system. Its details may be found in the "Verordnung betreffend Staatsbeiträge für das Volks-bülwesen, vom 25 Feb., 1892," which is in the Education Department Library, Whitehall.

Considerations of space make it impossible to give here the same details in regard to Cantonal grants to local schools other than primary and secondary schools* (*e.g.*, Technical Institutes†) or to the Federal Grants made to the various forms of professional, technical, and commercial education. Suffice it to say that the former are usually based on a fixed participation of salary expenditure, a fixed participation of building costs, and of apparatus, and a lump annual grant fixed every few years dependent upon the financial needs of the locality and the necessary cost of the education given in the school; while Federal Grants nearly always take the form of lump sums to individual local authorities proportioned both to their needs and to the scope of their work, and allotted through the channel of the various Cantonal Authorities.‡

In all cases grants give the right to call for complete accounts of expenditure, to make occasional general inspection of the work going on, and (in the case of Cantonal but not Federal Grants) to a considerable voice in framing the curricula and fixing the conditions of admission to the school.

In the case of what we in England call Secondary Schools, the grant question does not often arise, as they are almost wholly maintained from Cantonal Funds, as Cantonal Schools. [The Bund gives a grant to their commercial sides, but this is on a different basis.] The Commune where the school is situated may contribute; but when this is the case it is arranged at the establishment of the school, as a return for the benefit accruing to the Commune in having the school in its midst. The cost and the responsibility of the school, however, are, as a rule, held to be Cantonal because the school is essentially for the use of the whole Canton: its location in one place rather than another being settled by convenience of locomotion and access, as well as for administrative considerations.

* Secondary Schools of the highest type are, as we have said, nearly always Cantonal, and therefore there is no question of Cantonal grants to them, since it is the Canton which provides the whole of their maintenance, though sometimes the locality in which the school is situated makes an annual contribution to the school fund.

† The supervision of, and the grants paid to, Technical Education are not in the hands of the Education Department in the Cantons, but of the Department for Industry and Commerce. They are allocated on very similar lines to the foregoing.

‡ The Federal grant now being proposed for Primary Education will probably be handed direct to each Canton, and not take the form of grants to individual schools or localities. It is said that the amount of the grant to each Canton will be based directly on the number of teachers engaged in teaching in the Primary Schools of the Canton; a grant of £4 per head of teaching staff would amount to some £80,000 total annual Federal subsidy. It is believed that this system of apportionment will far more nearly meet the very various circumstances and needs of individual localities than would any other system of calculating needs; it will have the additional advantage of tending to increase local efforts and expenditure in the one point where improvement is most needed and most effectual, viz., the number of the teaching staff. There was a previous proposal, two years ago, for a Federal grant calculated on the basis of population and of financial difficulties taken together; the twenty-five Cantons being divided according to poverty by rateable values into three classes, and receiving a grant of 3*d*., 4*d*., or 5*d*., per head of population according to this class. But further inquiries have clearly shown the much greater benefit of the new plan, and it is said to have obtained the unanimous support of every Canton, in a memorial recently addressed to the Federal Council of State, by whom it is almost certain to be adopted.

Contrast with English system.

Taking the foregoing three typical examples as fair specimens of the Swiss systems of Central Participation in local expenditure on Education, is it not evident that they one and all afford an infinitely more rational and intelligible method for apportioning the central and the local shares in educational expenditure than is afforded by our complicated English system, of minute individual calculations, of 1*s.* per child, or of 6*d.* a subject, or 2*d.* an hour, of which the merest outline does not admit of being put more simply than the following:—

Education Department Grants.

"Under the Code of 1896 most of the grants are based on the average number of children in attendance. For infant schools and classes there is a fixed grant of 7*s.* or 9*s.* per child; a variable grant of 2*s.*, 4*s.*, or 6*s.* per child; a needlework, or needlework and drawing, grant of 1*s.*; and a singing grant of 6*d.* or 1*s.*; all paid on the average attendance. For schools for older scholars there is a principal grant of 12*s.* 6*d.* or 14*s.* per child; a grant for discipline and organisation of 1*s.* or 1*s.* 6*d.*; a needlework grant (for girls) of 1*s.*; a singing grant of 6*d.* or 1*s.*; and a grant for class subjects of 1*s.* or 2*s.* for the first subject, and of 1*s.* or 2*s.* for the second. These grants are all paid on the average attendance. In addition there is the grant for specific subjects of 2*s.* or 3*s.* for each scholar in Standards V.-VII. who is presented; and a cookery grant of 4*s.*, a laundry work grant of 2*s.*, and a dairy work grant of 4*s.* for each girl in Standards IV.-VII., and a cottage gardening grant of 2*s.* or 4*s.* for each boy in the same standards, providing they are properly taught the subjects, and prefer these grants to those for specific subjects."*

Science and Art Department Grants.

SCIENCE.

(*a.*) For each attendance of an hour's duration in a night class 2*d.* to 6*d.* in the elementary stage of a subject of science, and 4*d.* to 1*s.* 4*d.* in the advanced stage; except in mathematics, for which the scale will be, stage 1, 5*d.* to 6*d.* per lesson; stages 2 and 4, 3*d.* to 9*d.* per lesson; stages 3, 5, 6, and 7, 4*d.* to 1*s.* 4*d.* per lesson; and for each attendance of 1½ hours' duration given to practical work in the subjects enumerated in section j. of zxviii., in a laboratory which is reported by the inspector as properly equipped, 3*d.* to 9*d.* in the elementary stage, and 6*d.* to 1*s.* 4*d.* in the advanced stage.†

ART.

(*a.*) For each attendance of an hour's duration in an art school or class, according to the groups as set forth below, ½*d.* to 3*d.*, 1*d.* to 5*d.*, 3*d.* to 6*d.*, or 4*d.* to 8*d.* But no more than 40 attendances in group I. will be counted during one session on behalf of a student, or more that 60 in one or more of the other three groups. But if group I. be taken with the other groups, not more than 50 attendances can be counted altogether.†

Can we wonder that to the Swiss Educationist the attitude of our Central Authority as manifested in these arrangements, in spite of the great recent improvements in Education Department methods, and the partial abolition of payment by results and of fixed examinations, seems to be "that of a taskmaster bribing the teachers to grind out a certain amount of results

* Special Reports, Education Department, C. 8447, page 39.

† *Vide* the Science and Art Department's Directory of Regulations, page 32. Compare the Duke of Devonshire's speech in the House of Lords, August 1st, 1898:—"In my opinion, the system under which grants in aid to science and art teaching are now dispensed is, in consequence of the rapid and unforeseen extension of the system—a system which has extended and developed from very small beginnings indeed—so cumbrous and complicated, and, therefore, so costly, that I shall be very much disappointed indeed if, under a reorganised system and a scientific rearrangement of duties, a very considerable economy in administration cannot be brought about."

yearly from all the children he can scrape together, by any means that he can bring to bear"*? Whereas, as he says, "the Swiss system leaves the Local Authority free to make the best possible arrangements and the teacher free to make the best possible use of them, and the child free to get the utmost possible mental development out of them: the Central Authority undertaking then to meet a certain proportion of the expenditure necessarily incurred by these efforts, without any danger of curtailing the due rewards of toil and thought, in consequence of the occasional failure of individual scholars to come up to a required standard of attainment on a particular day in the year."† Yet the benefits of having a lump Grant allocated to the school on its work as a whole have often been dwelt upon in England. Mr. Yoxall referred to this plan in the following words, in the same Debate as that in which Sir John Lubbock so clearly showed the "grant-earning" view as above quoted (footnote, page 39):—

"He ventured to hope that they would be able in twelve months' time to adopt the principle of the block grant for English schools. He would suggest that they should do away with the present peddling principle of rewarding school managers and teachers, as this huckstering method of dealing with education was entirely subversive of the interests of the children, and that they should substitute the plan of assigning to every school a sure and fixed income year by year, according to the demands of the school, so long as the school satisfied the agents of the Department, the inspectors, that efficient work was being done."

And this principle of apportioning grants is already actually in working in certain spheres in England. Both the Treasury Grants to University Colleges, the Education Grants of the Board of Agriculture, and most County Council Grants to Secondary Schools are arranged on this basis, and have no *direct* relation to results or attendance or individual subjects: and they have been found to work excellently. As an additional advantage of adopting the "lump grant" system in primary schools, it may be mentioned that it makes it at once possible for the Central Authority to require a definite curriculum from every Primary school, a good general course, not merely in the three Rs. If certain subjects in addition to the three Rs were once definitely laid down as requisites from every primary school, we should soon be rid of the great difficulty which now besets the promotion of our primary school children in different parts of a town or county, whether to a Central Higher Primary School, or to a Secondary School, viz., the difficulty caused by the infinite varieties of attainment and of standards of knowledge in all sorts of subjects other than the three Rs, which the various children present on being admitted. And the country would in time come to have a clear conception of what a true Primary School Curriculum is, and of the aggregate of the various subjects in which a child may be expected to be proficient on completing his Primary Education.

* Compare the words of Mr. Gray, M.P., in Parliament, March 22, 1898:—"The tendency of late years has been to put into the Code the *maximum* number of subjects and to induce managers and teachers to take them up by offers of a few shillings in the way of grants. That is a wrong principle upon which to work in our elementary education system."

† The views here cited would doubtless now be modified in certain respects, were the speaker acquainted with the changes in the methods of inspection recently adopted by the Education Department.

2. Source of Funds.

Having thus examined the basis of the participation of each authority in educational expenditure, we may next consider the way in which the actual money provision is arranged for from the public purse, to meet the heavy calls thus made upon it, in its task of maintaining an adequate supply of education for the whole locality. One speaks of the whole locality advisedly, for it must be remembered that not only are the Higher Schools all public, *i.e.*, maintained by public funds and used by all classes of society, but even the public Primary School is frequented by each and all; there are practically no Preparatory Secondary Schools for boys under 12, such as we have in England; and private enterprise plays but little part in the educational provision of the true Swiss*; in fact, the Primary School is used by every class of the community alike, as also are all the public schools.

To understand the financial resources of Swiss education at all thoroughly it is necessary to bear in mind three main facts—

Sources of funds.

(*a*) That the whole educational expenditure, on education of *all* grades (not merely of portions of primary and of technical as with us), is always an integral part of the *general* public local expenditure. There are but few cases in which this expenditure is fixed in amount by a separate authority elected *ad hoc* or met by a special rate or tax levied *ad hoc*.

(*b*) That nearly all local taxation in Switzerland is *direct*, being leviable both on a man's capital and on his income (from that capital and from all other sources), not merely as is the case in England on the annual value of the house in which he happens to live (I speak of the average Englishman not possessed of any real property): and further that there is *very* little exemption; practically every man who has a vote pays the local rates directly, and is keenly alive to the extent and the incidence of the rates. Both the amount of taxation and the reason of the amount are thus accurately appreciable by every individual, even the poorest, for no one is exempt from rate or tax whose income exceeds £24 a year from whatever sources; and

Local Independence.

(*c*) That every man has a voice directly or indirectly in determining what shall be the scale and the scope of Communal Expenditure on Education; while he has at the same time a direct personal interest in the question, since whatever his rank in life, or his wealth, he will undoubtedly use the public Communal Schools for his children's education.†

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* The numerous private schools in certain parts of Switzerland are mainly frequented by non-Swiss.

† It may be appropriately mentioned here that the working classes as a whole, both agricultural and industrial, take a far keener interest and a more active part in all public matters, municipal, communal, educational, and other, than is the case in England. The Swiss workman reads his paper for political not for sporting news; he uses his vote for Municipal, Communal, and Cantonal matters whenever there is occasion (and elections are con-

As far as the *minimum* expenditure of a locality is concerned, the Central Authority has the right of seeing that certain general conditions (*e.g.*, as to teaching staff, buildings and curriculum) are adequate and satisfactory. But the Central Authority has not, as with us, any voice in limiting any additional efforts that the Commune may desire to make, out of its own funds, towards extending the educational advantages of its members, or towards making any higher developments of its educational supply. This at once suggests a vital difference between Swiss and English conceptions. For instance, in England many School Boards have desired to improve their higher Elementary Education and to extend its scope by providing Day Schools of a Higher Grade; but they have frequently been told by the Central Authority that they cannot take any such steps as would involve the School Board in any expense for this purpose, that it would be illegal to spend their rates in such a manner, inasmuch as they were only empowered by the Act of 1870 to use the rates to provide Elementary Education.*

Similarly when, twenty years later, it was decided that in England and Wales the provision of Evening Schools giving purely Continuative or Higher Education (instead of mainly Elementary as before) might advisedly be made a function of the Primary Education authorities, it was necessary, in order that this might be done, that a special Act should be passed (1890) to give this specific authorisation, by removing from School Boards the disability previously entailed on them under Section 14 (1) of the Act of 1870 taken in connection with Section 3, which required that in every school maintained by a School Board "the principal part of "the Education given must be elementary." Moreover, even when this considerable extension of School Board powers into Higher Education was given, it was specifically stated to be for the provision of *Evening* Schools: no mention was made of its extension to the provision of Day Schools for a similar purpose. Whereas in Switzerland no authorisation of this kind would have been needed by a local authority, so far as the spending of its own *local* funds were concerned; they are free from any such limits, both in theory and practice.

In the same way the Technical Instruction Committees of County and other Councils in England are forbidden, under Section 1 (1) g. of the Act which created them, to raise more than a penny rate for the purposes of that Act, and at the same time both County and Borough Councils are unable under the Acts of 1889-91 (except in Wales) to aid or

stantly taking place), and enters with intelligent interest into all questions at issue. Lectures and debates are his constant resource, and a large proportion of his leisure is devoted to educative reading, whereby he may form his own opinion upon current events. It is impossible that such a thing should happen in Switzerland as is detailed in the following extract from a leading English newspaper of 1897:—"I remember well, during a critical time in the great strike at Newcastle, finding a crowd of several thousands of workmen assembled in the open space opposite the offices of the *Newcastle Chronicle*. Anxious for information, I inquired the cause of the meeting. It was no meeting at all: they were waiting for the result of a horse race."

* See *School Board Chronicle*, Dec. 11, 1886, vol. xxxvi., page 631; and Feb. 25, 1888, vol. xxxix., page 187.

provide Secondary Education, as such, at all, unless they can veil their efforts under the form of aid to Technical Instruction only. It might almost be said that no Municipality could maintain even a public library until specially authorised to do so by the Central Authority (in 1850), nor Baths and Washhouses until 1846; and the amount they might thus spend was strictly limited even then.

These limitations, it would seem, are based on fundamental conceptions of local government and of local rating differing absolutely in England and Switzerland. What the Swiss hold regarding the rights and duties and powers of the Commune has already been shown. The Commune is to them the true source and centre of civic life and power, though for certain purposes the Communes have combined to place in the hands of the Canton, which they jointly form, certain powers of supervision, guidance and control over themselves for the common good. In England, on the other hand, whatever may have been the case in former times as regards the independence of individual Boroughs, it appears to be now generally accepted that in theory the power is in the hands solely of the Central Government, but that the latter has for convenience in certain carefully limited matters committed the exercise of certain carefully specified powers into local hands, but always under strict limits, and further that the exercise of any powers or activities *not* so committed is (unless specially authorised by early charter or otherwise) outside the scope of municipal rights and duties, and illegal.* This fundamental difference of conception—that a Local Authority exercises only such limited powers as have been specifically and expressly delegated to it by the Central Authority—makes a vital difference between Swiss and English systems of educational administration, expenditure and control.

For all these reasons, and still more because (*i.*) we English make so large a use of private schools, and (*ii.*) because so large a proportion of our voting population pay no rates directly, in consequence of the "compounding" system, and indeed do not necessarily feel the weight of local taxation at all, it is exceedingly

* The following lines from a leading article in the *Times* newspaper of February 24, 1898 exemplify (all the more strongly from the incidental character of the allusion) the prevailing English point of view, so different from the Swiss, on this matter:—"It is a dangerous delusion to imagine that Parliament can "perpetually interfere to correct the errors and restrain the abuses of the local "bodies *to which it has delegated large administrative powers.*" (The italics are not in the *Times*.) As to the possible reasons for this view, see note at the close of this chapter. At the same time it must be remembered, as modifying the statements made broadly above, that this view of the limited nature of local powers and the absolute authority of the Central is by no means the original theory or practice in England. Before the Municipal Corporations Act of 1835 or any of the great governing Acts of Parliament, herein referred to, were passed, many municipalities and corporations exercised large powers of rating and spending; and it is indeed a moot point how far such powers have ever been abrogated. Compare, for instance, the unlimited sums which the City of London can and does spend on its great Secondary School, its Library, etc., etc., in contrast to the statements above. But on the whole it is probably not far from the truth to represent the present theory and practice in English Local Government, and the basis of modern legislation, as being on the lines described in the text above. For further discussion on this point, see "The Principles of Local Government," by L. Gomme, Constable, 1897.

difficult to make any valid comparisons between the burdens upon a Swiss and upon an English individual in the matter of public educational expenditure. But it may be of interest, nevertheless, to show first the main outlines of a Swiss individual's rating paper, and then to find out what proportion of this rate or tax is caused by educational expenditure, and so arrive at the actual share which education receives in Switzerland out of the general calls upon the public purse.

Local taxation.

It may be said that, in most Cantons, the system of taxation for Communal Taxes is the same as that for the Cantonal Taxes; the greater part in both cases being direct. And in all cases a man's income is taxed as well as his capital.*

Nearly all Swiss taxation is under three main heads:

A.—Grund Steuer, *i.e.*, a tax of so much per mille on real property; full value; liabilities not to be deducted.

B.—Kapital Steuer, *i.e.*, a tax of so much per mille on personalty.

C.—Einkommen Steuer, or income tax in three classes, generally on different scales—

i. So much per cent. on yearly profits from trade, business, or occupation, or on salary.

ii. So much per cent. on yearly receipts from life rents, pensions and annuities.

iii. So much per cent. on dividends and proceeds of shares, scrip, stock, etc.

This tax on income is in addition to, not in lieu of, the tax on the capital producing the income: *both* are paid, in every case, where a man possesses capital.

Usually the rates of A. and B. are the same, and those of C. are on a scale bearing a direct ratio to the rate of A., which is, as it were, the fixed basis for all. Thus, when stating the taxation prevailing on any particular date in any town, it is only necessary to state the A tax (4 ‰ for example, as now in Bern), which is called the Steuerfuss, or tax basis; all the rest being deducible therefrom.†

Some or all of these taxes are (in most Cantons) on a progressive scale. In all, one may say, the general scheme of taxation is on these three main lines.‡

In some Cantons, as we have seen, local educational expenditure is in the hands of a body elected *ad hoc;* but in most the

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* We have already explained that the greater portion of Swiss taxation is direct. There are, however, no direct taxes levied by the Bund. The Federal Revenues are obtained mainly from indirect taxes.

† In Bern Canton the scale is thus:—

C iii : A : : 5 : 2
C iii : C ii : : 5 : 4
C iii : C i : : 5 : 3

} Thus the rate of A gives the rate of C iii, and from this is calculated C ii and C i.

An example is given on the next page. In Zurich, the taxes are not quite so minutely classified; there is simply one Einkommen Steuer and one Vermogen Steuer; but the rate of the latter still gives the fixed basis for the former, and is thus the Steuerfuss.

‡ The Zurich system is different from the above in certain details, notably (*a*) in the levying of a fixed householder tax *per capita*, (*b*) in the deduction from a man's rateable income of £8 for every child under 16 years old, and (*c*) in the strictly progressive rating of every tax.

actual amount of expenditure is decided by the elected Authority for all other local matters, only the administration and the spending of the money so voted being delegated to the elected or nominated School Commission or School Board. All accounts are published and all questions of increased expenditure are subjected to keen public investigation and discussion, so that it may be truly said that both the simplest and the richest citizen is alike aware of the portion of his taxes which is due to Education, and also of the actual cost to himself and to the Commune of the various schools which each and all are using and which each and all are interested in making as good as means will permit. From all this it is clear that to compare the burden on the individual in Switzerland with that on the individual in England is extremely difficult. In case it may be of any assistance to students in this direction, the following figures are given, showing the actual rates of local taxation that were levied in five different towns in Bern Canton in 1896, this taxation being inclusive of all public objects, not of education only. The last column shows what fraction the communal expenditure on Education in each town in 1895 was of the total communal expenditure on all objects in that town; so that the portion of the rate which was due to Education may thus be approximately realised:—

Examples of tax burden.

Town.	Population.	Communal Taxes, under the five heads explained on the previous page.					Out of the total Public Expenditure on all matters the following portion was due to Education
		Realty. A. 0/00	Personalty. B. 0/00	Income. C i. 0/0	Income. C ii. 0/0	Income. C iii. 0/0	
1. Bern City - -	57,000	2·0	2·0	3·0	4·0	5·0	One-half*
2. Biel City - -	15,414	3·0	3·0	4·50	6·0	7·30	One-third
3. Porrentruy City -	6,509	2·40	2·40	3·60	4·80	6·0	One-third
4 Thun City - -	5,505	3·60	3·60	5·10	7·20	9·0	One-third
5. Delemont City -	3,642	1·80	1·80	2·70	3·60	4·50	One-sixth †
The Bern Cantonal taxes also payable by every individual in each of these places were	Population.	Cantonal Taxes.					
	539,405	2·0	2·0	3·0	4·0	5·0	One-sixth ‡

Note.—The use of the Decimal Coinage makes the above table much simpler and more intelligible to the average householder than it would seem at first sight to an Englishman. A Swiss can see at once the exact amount, in francs, of his tax under each head.

Education, in the last column, includes all forms of Education, not merely the primary school; but the primary school is, in all cases, by far the largest item, as will hereafter be shown.

* In Bern city there is a Permanent Capital Fund of about £32,000 for all grades of schools. See page 35 above.

† This city has a very large Capital Permanent Fund for its Ecoles Primaires, Ecole Secondaire and Progymnase, which renders the expenditure from municipal funds on education much less than elsewhere.

‡ The details of this expenditure are given on page 57 below.

To make it clearer, let us imagine a man who possesses Real Property to the capital value of £5,000, a Personalty of the capital value of £2,000, a professional or trade income of £600 a year,* a life annuity of £100 a year, and annual proceeds from Realty and Personalty of (say) £300. This individual would pay, in Bern City, a town of the size of Ipswich, an annual sum of £51 for City Rates, and of £51 for Cantonal Taxes (because Bern City happens to have this year the same scale of local taxation as is levied by the Canton), or £102 per annum in all, for Rates and Taxes, without any question, as with us, of the value or the rent of the house in which he lives. If he lived in Biel, a town of the size of Salisbury, he would pay about £75 in City Rates, and £51 in Cantonal taxes.† If this seems a high and burdensome scale of rates and taxes (viz., £126 for a man with an income of about £1,000 a year), it must be added that for this (in addition to all ordinary Municipal conveniences), he can get his children educated up till at least 10 years of age for nothing,‡ and even if after that he gives them the best possible education up to 19 years of age he will have to pay for it the merest fraction of what the same thing would cost him in England (supposing it were obtainable within reasonable distance in the same county, which would be unlikely in the case of most English provincial towns.)

Note.—It may be added that the theoretical differences in the matter of Local Government and of rating between England and Switzerland, are perhaps mainly attributable to the peculiar method in which we distribute in each locality the burden of expenditure on local public needs, viz. (in theory, and so far as concerns the great majority of the population, who possess no Real property) upon the one sole basis of the value of the dwelling in which a man lives; a basis which, whatever may once have been the case, cannot now (in these days of limited companies and capital enterprise) any longer be said to stand in any fixed relation to his total funds.§ When to this point is added

* The exemption of £24 ought to be deducted from this in calculating the amount of tax.

† Or again, an artisan, having no real or personal property, and earning (say) forty shillings a week, would on the Swiss system pay about £5 a year in rates and taxes in Ipswich, and nearly £6 in Salisbury (whatever sort of house he lived in); a sum which would be quite sufficient to make him take a very real interest in educational or any other public developments of a character likely to raise the rates; whereas under our English system if he lived (as he probably would) in a cottage or tenement under that particular value at which compounding obtains in his town, he would not (consciously) contribute a penny towards local public expenditure, and would be able to vote freely for educational or any other municipal developments without directly feeling any effects of his "progressive" views on his own pocket.

‡ In Bern City a boy's education is free from 6 years old to 15 years old whatever school he be in. And if he be in the Primary School there is no charge for books or other materials.

§ Compare Professor and Mrs. Fawcett's Essays and Lectures, Political and Social, 1872, page 77. "It is well known that local rates are levied upon real property only, such as land, mines and houses. Personal property escapes these charges altogether. . . . But each year a greater portion of the wealth of such a country as England exists in the form of personal property, and there is no valid reason why the owner of such personal property should escape all local taxation." And similarly Lord Salisbury has stated in the Report to the Royal Commission of 1884 [C.—4402 page 99]: "There is no sort of ground for charging such an expenditure (viz., for the provision of artisan dwellings out of the rates) on the occupiers of land and houses only. Incomes of all kinds—whether they come from consols or foreign stocks, debentures, ground rents or mortgages—ought equally to bear such a burden, if it is to be borne by property at all."

the fact that rents of small tenements (which compound for rates) do not rise immediately with every rise in local rates and that a large proportion of a town population thus do not immediately feel any alterations in the rate of local taxation, it is manifest that local policy, both in School Board matters and otherwise, may be, in England, decided by majorities of voters who are not at the time called upon to pay the piper, though they largely decide in the calling of the tune.* Thus, in London, out of the total number of voters, considerably over 40 per cent. pay *no* local rates directly, in consequence of the "compounding" system, and thus feel no direct effects of any progressive developments of local public expenditure; and in a certain municipal borough on the east coast, of some 25,000 inhabitants, more than 3,000 (out of the total number of 5,000 voters) entirely escape paying local rates directly owing to "compounding"; and I am assured on competent authority, from two independent local sources, that the rents in compounding tenements in that town have steadily fallen, while the local rates have heavily increased, for some years past. It is at all events obviously impossible to compare public opinion and the enthusiasm for a large public expenditure in the cause of public developments, which exist in England and in Switzerland respectively, since the incidence of the local taxation burden is so wholly different in the two countries, and with us the cost of a progressive policy is not borne consciously and directly by *every* individual who votes for it, as is necessarily the case in Switzerland. It may, of course, be urged in support of the English system that ultimately (if not always immediately) a rise of local taxation inevitably touches the pockets of *every* inhabitant (since rents ultimately will rise with the improvements in the district), but that by masking the financial effects of big local or national improvements (through indirect rating and taxation) we make it an easier matter to get such improvements voted into action. But then under such circumstances it is surely impossible to describe these developments as signs of an earnest enthusiasm, or as the outcome of a deliberate sacrifice on the part of "the people," in favour of the improvements in question.

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3. Allocation of Funds.

How the amount devoted to Education is fixed.

Such being the general system of taxation, it remains to show, first, the manner in which the amount of taxation necessary for educational purposes is arrived at, and then how the proceeds of this taxation are applied by the Local Authority and the Central Authority, respectively, for the purposes of public education.

First, then, as to the Communal Schools. Every Communal School is managed by a Commission (either nominated or elected, as explained above), which settles the detailed application of the funds placed at its disposal for the purpose. These funds consist of (*a*) the proceeds of the School Capital Fund, (*b*) the proceeds of Communal Taxation, and (*c*) contributions from the Cantonal Exchequer. The amount of (*b*) is decided in most places by the general Communal Council, which sets apart a certain portion of the proceeds of general local taxation for the purpose, and hands this over to the Schul-Kommission to administer at their

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* Compare Professor Fawcett's Lectures above named, page 81: "Not long since we were conversing with a working man who, in consequence of the abolition of compounding, had just paid his first poor rate. He had not recognised the fact that he had for a long time as a compounder made a similar, though not so large, contribution to the rates in the form of increased rent. And our friend was now considerably aroused, and in a tone of indignation remarked: 'Is it not unjust that I should have to pay this money?'" The fact is, of course, that England has never yet explicitly adopted the theory (which underlies all Swiss taxation) that the burden of local taxation should fall on *each* individual, and should be *in direct proportion to the amount of his total wealth* (in whatever form) in each case; indeed, this very theory is expressly rejected by many writers, in favour of attempting to correlate the burden in every case with the amount of benefits estimated to accrue to the owner and occupier through location in the particular area rated, without reference to the greater or less amount of means possessed by the individual.

discretion; in some places, however, this right is in the hands of the Schul-Kommission itself, which is then practically a separate School Board, and itself levies such a rate as will produce the sum which it thinks requisite or desirable for Educational purposes during the coming year. But in most Cantons where this latter system of *ad hoc* local Education Authorities exists (as in Zurich), the separation between the educational and the general authority, and between the two rates or taxations, is dropped *in the case of the large towns*, and the one general Communal Council is supreme; this is done in order to obtain unity of administration and a proper adjustment between educational and general expenditure. In fact, the Special Education Board, possessing independence of the Communal Council in regard to deciding *limits of expenditure*, seldom exists except in those small places where the general communal expenditure is very little, and the funds requisite for even the barest school maintenance necessarily form the greater part of the call made on the communal purse.*

Ad hoc systems are rare.

But while the limits to be observed in local expenditure on Education are thus settled, as a rule, by the General Local Authority, the manner in which the money is to be actually spent is left wholly in the hands of the *ad hoc* Schul-Kommission or School Board, who know and are responsible for the whole management or working of the schools.† If it be urged that for this reason the latter should surely be also the Authority to decide upon the amount of public funds made available for the schools during the year (and consequently should fix the Education tax, as is the case with the School Boards for Primary Education in England) it is replied by Swiss economists (*i*) that it is always possible for some of the members of the School Board to be elected members, at the same time, of the General Local Authority, where they can thus adequately plead the financial needs of the schools and obtain due recognition for them amongst the various claims on the public purse; and (*ii*) that to put in the hands of the School Board, as distinct from the General Local Authority, the independent right to fix their own rate of expenditure is to give to education an undue and unwise (and indeed unnecessary) precedence over other local requirements; and (*iii*) that however important education may be (and no one, they say, is more alive to its importance than the Swiss) it should properly always be kept in due proportion to other Communal

Education is not a separate detached function of local government.

* In a certain village of 800 inhabitants in one of the larger Cantons, described in detail in Appendix E., page 76, the total disbursement from the Communal purse for non-educational purposes is only £105, while its school expenditure is £130, whereas in a large place like Bern City the total Communal expenditure is over £150,000, of which the educational portion is some £40,000.

† Compare the similar system practised by most of our County Councils in regard to their Technical Instruction Committees, the latter having to deal only with the application of the sums placed at their disposal by the vote of the Council as a whole. Our local authority for Primary Education, on the other hand, viz., the School Board, having been created in 1870, when our organisation of local government, especially in the rural districts, was still backward, was for this and other reasons made a separate independent local authority, with power to fix its own rate of expenditure, independently of all municipal and other local agencies. *Vide* Parliamentary Debates on the Education Bill of 1870.

matters, and will, in fact, gain not lose from being given its place in the list of general needs, instead of being relegated to a wholly separate category; for it is feared that under the latter arrangement the cost of education might come to be regarded as an unwelcome and "extra" claim upon the rates, through being rendered so conspicuous by its isolation, and thus be liable to meet with keener opposition from the more ignorant or more obscurantist ratepayers; and (*iv*) lastly, it has been noticed, in Cantons where such independent School Boards exist, that the School Board members become so engrossed with the school matters which it is their sole province to consider, that they are apt in their enthusiasm, to incur an expenditure on education out of all proportion to the natural resources of the community, and to the scale of the rest of the public expenditure on the general Communal needs which have to be met from the public purse.

How the money is spent.

For these various reasons, therefore, in the matter of education it is found best that the limit of local expenditure should be decided by the General Local Authority, and only the *method* of expenditure (*i.e.*, the administration of the funds) by the Special Educational Body.

Apportionment of moneys.

As regards the Cantonal Schools, practically the same system is followed. The amount of money which is to be set aside in a given year for cantonal expenditure on education is fixed by the General Cantonal Council (of which the Education Minister is a member, so that he can explain the special needs of his Department when the whole Cantonal Budget is being discussed), and the amount is thus fixed in due proportion to the other calls on the cantonal purse.

Detailed completeness of organisation.

But, when once the total sum available for education from the Cantonal purse is thus fixed by the General Cantonal Authority, the proportion in which these cantonal funds are then allotted to the various sections of public education is left entirely to the Education Department, which is responsible for educational administration.* This Department then sets aside a certain portion for the Cantonal Schools, for which it is directly responsible, and the rest for the various local schools (primary and others), whose expenses it only partially supplies by the grants described above. The funds allotted to the Cantonal Schools are in their turn handed over to the various Commissions in charge of each school respectively, and by them applied to the particular purposes in view; and similarly in regard to the Primary and the District Schools.

It is thus obvious that every branch and every grade and every type of education has its own scheme of finance; and that, as we have before said, the burden of educational expenditure in each case is variously but deliberately distributed, on a

* It should be added, however, that the Central Authority, in each Canton, for *Technical* Education (in the strict technological sense) is not the Education Department but the Department of Commerce and Industry. Similarly the Federal Grants to, and supervision of, Technical and Commercial Education, are vested in the Ministry of Commerce. This arrangement also obtains in France and in Germany.

thought-out plan, amongst the three constituent authorities—the Commune, the Canton, and the Bund; the one common principle being that the limit of the amount to be spent is as a rule decided, in each grade of education, by the General Authority, while the Education Authority only decides the manner in which the said sum is spent; and, further, that no grade of education has an exclusive, or largely preponderant claim to public funds, or to public interest, to the detriment of all the rest.

It is, however, equally obvious that, as the systems of grants vary considerably in the different Cantons, the actual apportionment of educational expenditure between the locality and the Central Authority must also vary considerably. And in the same way the varying needs of the different Cantons also cause the share borne by the Bund in each Canton to bear very varying proportions to the total expenditures of Canton and Commune taken together. Yet all of these variations are intentional, not haphazard, and are due to deliberate plan, not (as is the case with us) to any accidental or automatic increment of the number of children provided for, from time to time, in the respective types of schools in the various localities, or to the number of subjects taught.

For these reasons I have compiled a table of educational finance (see page 60) from a great many different sources, in order to show at a glance (1) the actual incidence of the burden of educational expenditure, in each of its different grades, upon the three different sources of funds above referred to, and also (2) the proportion of aid which each grade and type of education respectively claims and receives from the public purse. Every endeavour has been made to render the table accurate and complete, but the accounts of such varied matters are naturally so intricate that a certain margin for error must be allowed in using it. The money figures are given in English sterling to facilitate comparison, because to English eyes long rows of francs are apt to convey a false suggestion of actual amount. Particulars are given separately for the three Cantons of Zurich, Bern, and Geneva, respectively, in order to show the variety of incidence in these three places which we have taken above as typical of the three different systems of educational finance; while the whole of Switzerland is also given, in order to show the results as a whole, and these are further compared with such similar figures as are obtainable for England and Wales.* Some of the results given in the table are of considerable interest, when it is remembered that there are scarcely any private schools in Switzerland, and that these figures may, therefore, be taken to represent practically *all* the money that is spent on education in Switzerland, except some private expenditure for Kindergartens, on Commercial classes, and so forth.

Total expenditure on Education under the various heads.

It will be seen from the table that, taking Switzerland as a whole, the Primary School (which is the school used by all

* For details of this English expenditure, and cautions as to comparisons with Swiss expenditure, see Appendix pages 78-81, and the notes on page 61.

classes of the population, in fact, by every individual) is responsible for rather more than half the total public expenditure. In England, on the other hand, although the Public Primary School is unused by a considerable portion of the population, we give to Primary Education practically nine-tenths of all the public funds devoted to education. The Swiss Volkschule as a whole, inclusive of Primary, Higher Primary, District, and Evening Continuation Schools, consumes nearly three-fourths of the whole sum devoted to education; but in England no accounts exist to show how far public funds are devoted to these grades in all. Higher Secondary Education comes next in Switzerland, and Technical Instruction close behind. In regard to the latter, it may be noted that the Swiss spend more than twice as much (in proportion to population) on Technical Instruction as we spend in England and Wales from public funds, so far at least as public accounts show it. In regard to Secondary Education in England (both Lower Secondary Schools and Higher Secondary) it appears that we are content to spend about one farthing per head of population, out of public funds, on this grade of education, while Switzerland, democratic though she is, devotes to it about fifty-five times this sum. The English figure appears in the table as ¾d.; but this is because Wales is included, in which country intermediate education receives direct support both from local and from central funds, under an Act which has as yet no counterpart in England (section 1 (4) Local Taxation Act, 1890, and section 8 Welsh Intermediate Education Act, 1889). If we take Wales by herself, we find that about 5d. per head of population was spent in 1895 from public funds, local and central, on Intermediate Education, and this amount has risen considerably since then: while the figure for England alone still remains about one farthing.

It should be added that the table shows only the expenditure from public funds (rates and taxes) not sums provided from voluntary contributions or endowments (both of which do so much for all grades of education in England); the objects of the table being to show (*a*) how much the two countries have respectively been willing to rate and tax themselves for the maintenance of education out of the public purse, and (*b*) in what proportions these public funds have been allotted respectively to primary, to secondary, and to technical education, in the two countries.*

In regard to this latter point, it will be seen from the Table how differently Switzerland and England (in so far as regards appropriation of public funds) evaluate the relative importance of the different grades of education from the national point of view. For, of her total public expenditure on education, Switzerland devotes 58 per cent. to her Primary Schools, 13 per cent. to her

* The Swiss expenditure on school buildings is usually entered under the Public Works Department Accounts, and it is, therefore, difficult to disentangle the amount thus spent, and to add it to general school expenditure of the whole country. For this reason, we have omitted both Swiss and English expenditure on school buildings as far as possible. Samples of detailed budgets will, however, be found in the case of three individual Cantons on page 58, showing to what extent this must be allowed for, when calculating the *total* expenditure on education, and what is the normal outlay on buildings.

Higher Primary and Continuation Schools, 10 per cent. to her Secondary Schools, and 9 per cent. to Technical Education. We in England, on the other hand, keep no complete accounts of most of our educational expenditure, and never work out any scheme of the relative values, or proportionate needs, of all the various grades. But, so far as can be estimated from such public accounts as exist, it would seem that we give practically 90 per cent. of our total public educational expenditure to the Primary Schools, leaving 8 per cent. to Technical Education, some small amount never yet calculated for Continuation Schools, and only 0·6 per cent. to Secondary Education (and indeed still less than this if Wales were excluded).‡

Having thus dealt, so far as possible, with the actual amounts devoted to education in Switzerland, it may be well, in order to complete this financial study, to show the place of education, financially, amongst the various burdens of the Swiss public purse, by showing relatively, as well as absolutely, the share of public funds which is apportioned by Swiss Local and Central Authorities to education as compared with other branches of social activity and public service. For this purpose we will make certain extracts from the Cantonal Budgets for 1896 of three typical Cantons, and show the proportion which educational expenditure bore to the other items of the Cantonal accounts. The figures are of Cantonal expenditure only; the expenditure of the Communes is *not* included here; and, therefore, this table shows only about half the total public expenditure on education in the three Cantons in question.

Proportion of educational to other expenditure

TOTAL CANTONAL EXPENDITURE ON EDUCATION OF ALL GRADES IN 1895 (exclusive of Communal expenditure), as compared with public expenditure on other objects.

	BERN CANTON.	ZURICH CANTON.	ST. GALLEN CANTON.
Population	539,305	339,014	229,441
Grand total of cantonal expenditure on *all* public matters from *cantonal* funds only	£1,048,924	£633,782	£153,879
Out of this sum the—			
Military Department took	£48,426*	£42,266	£29,747
The Naval Administration	none	none	none
The Poor Law Administration	£47,096	£10,728	(?)
And Education	£153,664‡	£155,039	£26,815
or about	one-sixth	one-fourth	one-fifth

of the whole Cantonal expenditure† and this without taking into account any of the sums spent by the Communes.

* Compare the following items from the Parliamentary Estimates for 1898 of the United Kingdom, bearing in mind, of course, that Switzerland has no Colonial or Foreign Empire to maintain:—

Army	£19,220,000
Navy	£23,778,000
Education (mainly Primary)	£11,965,800
Total Estimates, about	£116,007,000

† It must be remembered that this is for Cantonal expenditure on education of all grades, not merely primary.

‡ Throughout this memorandum, England, or England and Wales, is under consideration; Scotland and Ireland have been omitted from the calculations, as possessing such widely different systems and organisations as to invalidate comparisons.

As emphasising the part played by the special Authorities for technical, as distinct from general education, it may be well to show how this cantonal expenditure on Education was apportioned between different Departments in each case:—

	Bern.	Zurich.	S. Gallen.
Education Department - -	£119,999	£138,471	£23,122
Dept. of Industry and Commerce	£10,361	£1,578	£1,574
Department of Agriculture -	£14,653	£44,434	£119
Department of Public Works *i.e.*, for School Buildings.	£8,651	£10,556	£2,000
Total‡ - - - -	£153,664	£155,039	£26,815

The above is, as we have said, only Cantonal expenditure, but similar proofs of liberal provision for education from *Communal* funds could easily be produced. Thus in Zurich Canton, for example, the expenditure of the Communes on education amounted to *one-fourth* of their total expenditure, just as was the case in the Cantonal Budget. The expenditure of all the Communes of Zurich Canton added together was as follows:—

	£
General Communal Expenditure - -	503,640
Church Expenditure - - - -	24,189
Poor Relief - - - - - -	66,684
Volkschul - - - - - -	180,654
Higher Volkschul - - - -	23,645
Secondary and Higher Education (mainly provided from Cantonal funds, see column 5 in the Statistical Table, page 60) - - - - - - -	? ?
Total Communal Expenditure -	£798,812

If we add this to the Zurich Cantonal Budget, we find that—taking Communal and Cantonal expenditure together and including the Federal Grants,—Education, including all grades, took £357,963, out of a total public Cantonal and Communal expenditure on all matters of £1,847,746. The Canton of Zurich, it may be noted, is in population about equal to the East Riding of Yorkshire, inclusive of Hull.

‡ It may be interesting to compare the proportions shown in the following figures for the London County Council:—

	1890. d.	1898. d.
County Rate for General Purposes - - -	13¼	14
Asylums Board Rate - - - - -	2¼	4⅓
Rate for Primary Education - - - -	10½	12⅔
Rate for Secondary Education - - -	0	0
Rate for Technical Education - - -	0	0

But it must be noted that these figures by no means cover the same ground as the Swiss figures, that they are levied on wholly different systems, and are only very rough indications of the proportion which education bears to some of the other calls on the public purse in London County. It should specially be noted that the Swiss Cantonal figures for education in the above table are for all grades, but do not include the large sums spent by the Communes, while the London figure is for Primary Education only, and does not include the large sum contributed from Imperial funds. It should perhaps be added that London, by spending on Technical Education the whole of the Residue Funds (whiskey money) which it might, if it chose, devote to the relief of the general rates, is *practically* rating itself indirectly for the development of Technical Education, to the amount of a little more than a penny in the £.

TURE FROM PUBLIC FUNDS XCLUDING BUILDINGS).

4	5		6	7
Primary Training Colleges.	Secondary Education Middle and Higher Schools (*b*).		Universities	Technical Education of all Grades.
Total. £	%	Total. £	Total. £	Total. £
—	38	63,557	—	53,572 (*d*)
30,530	60	101,558	97,250	
—	2	1,974 (*c*)	—	96,854 (*e*)
30,530		£167,089	£97,250	£150,426 (*m*)
d.		s. d.	d.	s. d.
2¼		1 1¼	7¾	1 0¼ (*m*)
1·8		10·3	6·1	9·3

Primary Training. Colleges.	Secondary Education Higher and Middle Schools.		Universities	Technical Education of all Grades.
Total. £	(*w*)	Total. £	Total. £	Total. £
0 (*z*)		250 (*β*)	0 (*z*)	19,496
0		74,706 (*β*)	?	634,893
9,440		6,339	32,015 (*β*)	292,638
09,440		£81,295	?	£947,027
		s. d.		s. d.
¾d. (*z*)		0 0¾ (*z*)	?	0 8
0·9		0·C	?	7·9

Primary Training Colleges.	Secondary Education Higher and Middle Schools.		University.	Technical Education of all Grades.
Total. £		Total. £	Total. £	Total. £
—	(r) 81	39,600 (*r*)	—	22,704 (*d*)
7,654	17·9	8,705	24,374	
—	1·1	288 (*c*)	—	4,914 (*g*)
7,654		£48,593	£24,374	£27,618 (*n*)
d.		s. d.	d.	s. d.
3		1 9¼	10¾	1 0¼
2·5		16·5	8·2	9·4

Primary Training Colleges.	Secondary Education Higher and Middle Schools.		University.	Technical Education of all Grades.
Total. £	%	Total. £	Total. £	Total. £
—	19·4	2,400	—	14,896 (*d*)
5,332	78·4	9,705	17,630	
—	2·2	272 (*c*)	—	5,998 (*f*)
5,332		£12.377	£17,630	£20,894 (*n*) (*f*)
d.		d.	s. d.	s. d.
3¾		8¾ (*q*)	1 0¼	1 2¾
1·6		3·8	5·5	6·5

Primary Training Colleges.	Secondary Education Higher and Middle Schools.		University.	Technical Education of all Grades.
Total. £	%	Total. £	Total. £	Total. £
—	—	—	—	4,461 (*d*)
?	97·3	15,158	17,463	
—	2·7	424 (*c*)	—	3,045 (*h*)
?		£15.582 (*t*)	17,463	£7,506 (*n*)
		s. d.	s. d.	s. d.
?		2 10 (*b*)	3 3¼ (*u*)	1 4¾
?		19.2	22.3 (*u*)	9.8

The figures in this table, which are for 1895, must not be taken as absolutely correct or comprehensive. They are approximate. They may serve, however, allowing margins for errors, to show how a high rate of expenditure in one branch of education is inevitably gained at the cost of a low expenditure in another. And it is hoped that the table may serve as a graphic object lesson in the meaning, and the advantages of having a complete National Organisation of Education in every grade, and of the principle of comparing the proportionate needs and claims of *each and every grade* of education respectively on the public purse.

NOTES.

(*a*) This column includes Primary Schools, some Truant Schools, Primary Teachers' Pensions, Administration and Inspection, but scarcely any expenditure on buildings.

(*b*) In the English sense.

(*c*) These sums are Federal Grants to the Commerce Section of the Gymnasium.

(*d*) I do not possess the accounts necessary for disentangling the Communal from the Cantonal expenditure on Technical Instruction. As the latter is generally the greater portion, the whole is throughout entered to the *Cantonal* expenditure in the first left-hand column of this table, where the Total Expenditure is given. This arrangement somewhat vitiates all the percentages in Column 1.

(*e*) This sum is thus apportioned :—Industrial, £18,812 ; Agricultural, £8.372 ; Commercial, £1,908. There is also a sum of some £35,000 for the Great Federal Polytechnic, or Technical University, in Zurich City, and various miscellaneous disbursements, amounting to £32,762.

(*f*) This sum is thus apportioned :—Industrial, £4,292 ; Agricultural, £504 ; Commercial, £200. The Federal Polytechnic is not here included because it is not a Cantonal Institution.

(*g*) This sum is thus apportioned :—Industrial, £4,052 ; Agricultural, £792 ; Commercial, £68.

(*h*) This sum is thus apportioned :—Industrial, £2,508 ; Agricultural, £532.

(*l*) This term connotes, in columns 2, 3 and 4, all the School Boards, and in columns 5, 6 and 7, the Technical Education Committees in non-County Boroughs and in Urban Districts.

(*m*) This sum does not represent all the money that is spent on Technical Education in Switzerland, but further accounts are not obtainable.

(*n*) This sum includes Manual Instruction Grants to Training Colleges and Higher Primary Schools, etc., etc.

(*p*) This abnormally high rate in Zurich, as compared with other Cantons, is mainly due to her very high rate of expenditure in Primary and Higher Primary Education.

(*q*) The high expenditure in Zurich on popular education is far above all other Cantons. While it has earned for Zurich great educational renown, it may be noticed that it has naturally led to very great parsimony in the matter of Secondary Education. The greater part of the abnormality is due to the immense Primary School expenditure in Zurich City. It is also due to the very small provision of gymnasien or Higher Secondary Schools, in proportion to the large area and population of the Canton.

(*r*) This high proportion of Communal contribution to High School and Secondary Education in Bern Canton is due to the facts that (i.) from historical reasons Bern City has retained her great Gymnasium, instead of it being a Cantonal institution ; and (ii.) that there are several Progymnasien in the Canton, in various towns, instead of only one for the whole Canton, as is the case in the smaller Cantons.

(*s*) Geneva is the Canton in which centralisation is most strongly practised. It is worked largely on the French Model.

(*t*) In Geneva Canton the area is so small that a much larger proportion of boys can attend the Cantonal Gymnasium (instead of contenting themselves with Higher Primary Schools) than is possible in most Cantons.

(*u*) This high figure for University Education is due to the fact of the University being in a Canton with so small a population.

(*w*) The English totals are not complete : but no exact accounts or reports can be obtained for what is here missing. For details see Appendix F.

(*x*) This includes some expenditure on Industrial Schools, but no expenditure from loans, on school buildings, etc. Nor does it include £1,023,121, from school fees and voluntary contributions, which can hardly be included under public funds, or under expenditure from local authorities.

(*y*) There ought to be in this column the School Board expenditure on the Upper Portions of Higher Grade Schools and on Continuation and Evening Schools, and County and Municipal expenditure on the same, as also Central : but none of these can be properly disentangled from columns 2 and 7, where they are therefore included.

(*z*) Expenditure from Voluntary contributions and from Endowments is excluded throughout.

(*β*) There ought to be several sums in this column which cannot be disentangled from column 7.

(*γ*) For details of all the English figures see Appendix F, pages 78–81.

V.

GENERAL DEDUCTIONS FROM THE SWISS ORGANISATION OF EDUCATION.

What then are the chief lessons to be drawn from our comparative study of Swiss systems of educational finance and of Swiss methods of expenditure? Financially speaking, Switzerland is an excellent object lesson in the advantages of the principle of Decentralisation, in public education, not carried to extremes but combined with a wholesome corrective of partial central aid and considerable central control. As we have said in an earlier page, every locality is encouraged to take the deepest interest in its educational work from the fact that it provides from its own resources so large a portion of the necessary funds; and the effects of this freedom and full responsibility have been unquestionably good in evolving the maximum of good results from a given expenditure of public money. We have here, in fact, an example of the admirable *dictum* of Lord George Hamilton uttered when contrasting Indian and English systems of public finance:—

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> "In this country (England) we know how local expenditure has increased much more rapidly than Imperial expenditure; and this is not due to inherent extravagance of the bodies controlling this expenditure, but to the inevitable result that, as civilisation and prosperity increase, so the functions of local authorities are raised to a higher standard of duty and ambition. In this country, however, the great bulk, if not the whole, of this expenditure falls directly upon the ratepayers, and this acts as a natural check upon undue development of expenditure;* but if the great bulk of expenditure fell, not upon local rates, but upon portions of Imperial revenues, the House will easily understand that local wants and local expenditure would develop with extraordinary rapidity. It is most desirable to extend financial decentralisation in India, and it is only by constant development of this principle that the ever-increasing burden of administration in India can be adequately met."

In fact decentralisation of the financial burden, and not only of the direct management and responsibility, tends to an increased economy, without however lowering the general standard of excellence, if only the Central Authority has power, whether by means of its grants or otherwise, to maintain a high level of work in every locality.

Advan-
es of Cen-
Control.

And in this latter point also Switzerland offers us at the same time a most useful lesson and guide in its careful retention of an effective form of Central Control. And, in these days, when so much is said about extending the powers of our local Authorities to deal with Secondary Education, instead of limiting them to Primary and Technical as at present, it cannot but be

* Lord George Hamilton was obviously not referring to our Educational Expenditure; indeed, the latter may be taken as the exception which proves his rule, since from 1870 to 1896 the State expenditure on (Primary) Education has increased 650 per cent., but the local expenditure only 387 per cent. *See* Special Reports, C. 8,447, page 32. Concurrently the State's share in the total expenditure on (Primary) Education has increased from 37 per cent. of the whole in 1870 to 47 per cent., while the locality's share has decreased from 62 per cent. of the whole to 53 per cent. This aptly exemplifies Lord George's dictum, that centralising the financial burden will generally lead to much increase of expenditure from public funds.

useful to study carefully the results of the various Swiss systems of finance and control. For Switzerland offers a striking proof of the fact (most necessary to be remembered in a country like ours where, as also in Switzerland, an absolute central autocracy is out of the question), that the necessary quantum of central control over local freedom so essential to the maintenance of a high level of educational effort can quite well prevail concurrently with the truest democratic developments; and that it can best and most simply be attained, and retained, by keeping in the hands of the central authority the powerful leverage derived from the dispensing of central grants in aid of local expenditure; such grants, however, to be based on certain clearly defined principles of apportionment, varying perhaps for the different types and grades of education, but representing in every case a systematic division of the burden between the locality and the State, upon some clearly intelligible principle. For it is this power of financial aid—carrying with it as it naturally does a voice in the framing of curricula and of school conditions though not of any undesirable interference with the teacher or his methods,—that can alone take the place with us of that use of the privilege of exemption from part of military service which is such a potent weapon in the State control of Secondary Education in Germany. We in England have experienced, perhaps too acutely and often with disastrous results, the effectiveness, for controlling purposes, of a Central Grant System, both in Primary Education and in courses of science. It has shown itself capable of effecting the most drastic changes in school curricula. But no one will maintain that the unsound methods occasionally adopted under it in the past, and their unfortunate results, are necessary adjuncts of any State Supervision or Control. If only the Central Authority is permeated with practical knowledge and experience of School life, and if the regulations of administrators are constantly modified by conference with persons engaged in active teaching, no such evil results need arise. As has elsewhere been said, the Treasury Grants to our University Colleges, and some of the London and other County Council Grants to Secondary Schools, are sufficient evidence of this from English experience. And continental experience will fully confirm the belief that, given the best educational experience as an efficient factor in Central Control, it is quite possible to avoid unsound and disastrous methods, and yet to adopt an effective principle for giving power and sanction to a Central Educational Authority on the soundest and best lines, not only over Primary and Technical Education as at present, but also over that large and important field of National Secondary Education in which, as some say, lies at present one of the great sources of danger to our national strength, and which, when compared with the standard and provision prevailing in Germany or Switzerland, stands revealed as gravely in need of speedy aid, guidance, organisation and control.

But beyond and above these points of Decentralisation and of Central Control, there is borne in upon one, after every investigation of Switzerland, the inestimable benefit that she derives from

) Need for ompre- ensiveness f Educa- onal rganisation.

(*i*) the *comprehensiveness* and (*ii*) the intelligibility of her educational organisation. The very fact that it is possible to give such a complete and yet analytical table of expenditure as that given on p. 60 above and to show at a glance the relative amount of effort that is being given to each grade of national education,—this alone is of immense value to her statesmen as a guide towards seeing that each grade, each type, has its due share, and that no one portion of the educational field is too highly developed at the expense of and to the detriment of another. To realise the relative values, for the life of the nation, of *each* of the various grades of education, is in itself an immeasurable achievement: and to embody that realisation in practical measures and in proportionate expenditure is a national benefit of the first magnitude. Yet this is an achievement which we in England, as a nation, have never even considered in any practical way. Our national efforts in the matter of educational organisation have always been spasmodic, our arrangements all made in piecemeal fashion, our schemes wholly disconnected one from another, and so rendered largely ineffectual and sometimes even mutually destructive. Well might the able and experienced Swiss Educationist who recently visited England, and who has had a long acquaintance with English, Dutch, American and Swiss education, and closely studied the History of each, thus describe the process of our English developments:—"At one period of your "history your Parliament is concerned with the state of the "nine greatest gymnasia of your country, and is moved to "legislate thereon; at another, some years later, some of "the smaller grammar schools come in for a little attention, "and a central authority is created to bring about various "reforms, but is itself altered at a somewhat later date. In "another year the constitution of the ancient Universities is over- "hauled, while in the next there is a debate on the establish- "ment of communal primary schools; a little later there is a "cry for more science education in every school, and certain "steps are taken to bring this about; next, but *longo intervallo*, "comes the question of the age limits of primary education, "interspersed at varied intervals with the provision of technical "instruction and the creation of new local authorities "for education in addition to those already working for "popular education in the same areas. Soon your legislators "take a turn at the abolition of fees in primary schools, "then with the curriculum of evening continuation schools, and "later again with the condition of the public provision of lower "and middle secondary schools; mixed up, however, with the "extremely thorny question of the preservation of denominational "primary schools; and these various isolated processes have been "taken up at different dates spreading over an interval of half a "century. For all the world like a man seeking to build "a substantial house by working spasmodically at odd portions of "the structure on quite isolated plans, fashioning minute details "of some upper parts when he has not set up, nor indeed even "planned out, the substructure which is their sole possible "foundation and stay; his very best efforts necessarily being

"thus rendered abortive by the fact that, while he is hammering "at this portion of it or that, he possesses no clearly thought out "plan of the structure as a whole; and when at last "he comes to this most important step, after 50 years of these "varied efforts, he finds all his available funds irretrievably "sunk in the creation and maintenance of the basement "and one or two outlying portions of the work, with no means "left for making good those broader or higher portions, by which "alone the building as a whole can be made complete and secure, "or be protected against 'the act of God or the Queen's "enemies.'"

Surely an unbiassed view of foreign systems of complete educational organisation will convince us that this is no exaggerated statement of what has happened in England in regard to public education. As far as the State is concerned, our Primary Schools now receive some 7¾ millions sterling a year from the public purse (1897-8), the science portions and drawing portions of a few schools and scattered classes receive some £300,000, and some eight or ten local University Colleges, of very varied types and standards, receive some £25,000; but our Secondary Schools, on which largely depends our national supply of leaders, alike in Commerce, in Industry, in Defence and in Politics—and surely therefore our supremacy as a great nation—our Secondary Schools are left in England to exist in what condition they may, without the State lifting a hand either to aid them when in difficulties,* or even to insist that they shall be sufficient in number, efficient in teaching, and properly distributed as to areas, in order to meet adequately the urgent needs of a leading Power in modern Europe.† And when pleas of this kind are urged, there are those who reply that a democracy cannot burden the public purse with the claims of any but "the people's schools," or else that the State cannot be allowed to infringe in any way upon the liberty of the individual locality, of the individual schoolmaster, of the individual school, and of the individual parent (*and why not also of the individual school boy?*).

* The reference here is to Secondary Schools as a generic type of education. There are, of course, certain grants of money made by the Science and Art Department, of which a portion goes to certain special classes in some of our day secondary schools; but this is only in respect of one limited type of science curriculum, not to Secondary Schools as such. Moreover, England in this sentence does not include Wales, where (as in Scotland) certain Treasury funds are available for Intermediate and Secondary Schools as such.

† For the dangers attending the exclusive attention on the part of a Government to primary education only and its neglect of higher education, compare M. Renan's words:—"Those countries which have created a considerable popular instruction without any serious higher instruction will long have to expiate this fault by their intellectual mediocrity, their vulgarity of manners, their superficial spirit and their lack of general intelligence." M. Renan is not here referring to England, which, as he would have been the first to acknowledge, has long possessed a certain amount of magnificent provision for higher instruction in certain grades and types of schools. But his words suggest that there are serious dangers involved in any system which fails to secure balanced support and comprehensive oversight for *all* grades of national education. In this connection it may be noted that out of the eight and a-half millions sterling contributed annually from the National Exchequer to public education as a whole in England and Wales, only half-a-million is allocated to education other than primary. *See* Appendix F, page 81, of this memorandum.

(d) Contrast with English chaos.

It is to objections of this nature that Swiss examples give such convincing answers, if we compare, even for a moment, the position of education in England and in Switzerland respectively, in public consideration. What do the citizens of any town in England know about the actual condition of their different schools? What do they know even as to the total amount of public money expended on the whole education of their town, as compared with the other calls upon its public purse? Still less, what do they know of the relative amounts spent within its area on each of the various branches and grades of that education, and of the extent to which the several schools are mutually helpful and complementary ?* Probably several isolated bodies of managers supply a large portion of the town's primary education, while a wholly separate body of elected citizens make provision for the rest (this provision being strictly limited not by what the local elected authority may wish to have for the use of its citizens, but by the technical limits of the "necessary elementary accommodation" for that town). The continuation schools may be supplied by any number of separate bodies, without any necessary regard for co-ordination, or any means of noting the total amount of expenditure incurred for this one portion of public education in the town. A single secondary school (or possibly two) may be left to make the best fight it can with the small funds left it, perhaps centuries ago; or possibly the town council endeavours to supply the gap, without any means of organic connection with the local authority of the town for primary education; while the nearest higher school, or school of commerce, existing perhaps in a town a few miles off, is not necessarily brought into any organic relation to the needs of those neighbouring places, which, if properly co-ordinated, would be its natural sources of pupils and of interest.

(e) Complete organisation of all grades of Education.

Whereas in Switzerland the Primary Schools and Continuation Schools are completely organised and co-ordinated under the one local authority, and the Higher Schools receive the most careful attention and fostering care from the State, as being perhaps the most vital portion of educational provision, on which the national life and progress mainly depend (yet Switzerland surely cannot be said to be false to the principles of Democracy?): and, in fact, as we have seen, the public purse is not opened for any form of education whatever until the highest available educational opinion (as voiced in the Central Authority, which takes cognisance over all grades of education) has shown in what

* Compare the following verdict from an Education Department Report of twenty-five years ago, which, with the exception of a few northern towns where in the matter of Primary and Evening Schools the School Board and the Town Council (by co-operation) have attempted some organisation of supply and grading of schools, might be written with equal truth of the prevailing conditions in 1898:—"Every school struggles with every other school to get all the children of any sort who will come, and consequently when, if they were under one rule, schools in close proximity might be made to serve different purposes in a general scheme of education, they now serve rather to throw difficulties in each other's way and to keep each other at a common level, and that a low one."

way, *and to what degree*, each and every element and grade and type of education is to be aided and maintained, so that no one section is aggrandised to the detriment of the rest, but all grades and types are mutually helpful, each one organically connected with those above and below it, and the whole responds to the carefully graded scheme of varying types which it is intended to fulfil. It is in this way, and this way only, that good results are to be looked for, whether from public education as a whole or even from any particular grade of education, or indeed from any, even the most lavish, expenditure of public funds.

Surely it is not too much to hope that England may yet learn to value and to create for herself a true and complete organisation of her schools not merely of her Primary Education, but also of that most valuable asset of the national welfare—her Middle and Higher Schools; so that each and every grade of education, and each and every type of school may have a clear presentment before it both of the function which it is intended to fulfil, of the results which it is framed to produce, and of the area which it is created to supply. Thus, and thus only, can each and every school, and each and every grade of education, have its due share of national interest and assistance, and be enabled effectually to play its due part in national development.

R. L. MORANT.

APPENDICES.

PAGE

A.—Chart showing approximately the relation of expenditure to excellence in primary Education - - - - - - - - - 69

B.—Diagram showing the great differences between the various Cantons composing the Bund, in respect of area, productivity, population, industry, commerce and agriculture, with English comparisons - 70

C.—Educational map of Bern Canton, showing completeness and distribution of school supply - - - - - - - - - - - 70

D.—Educational statistics of Bern Canton, with English comparisons - 71

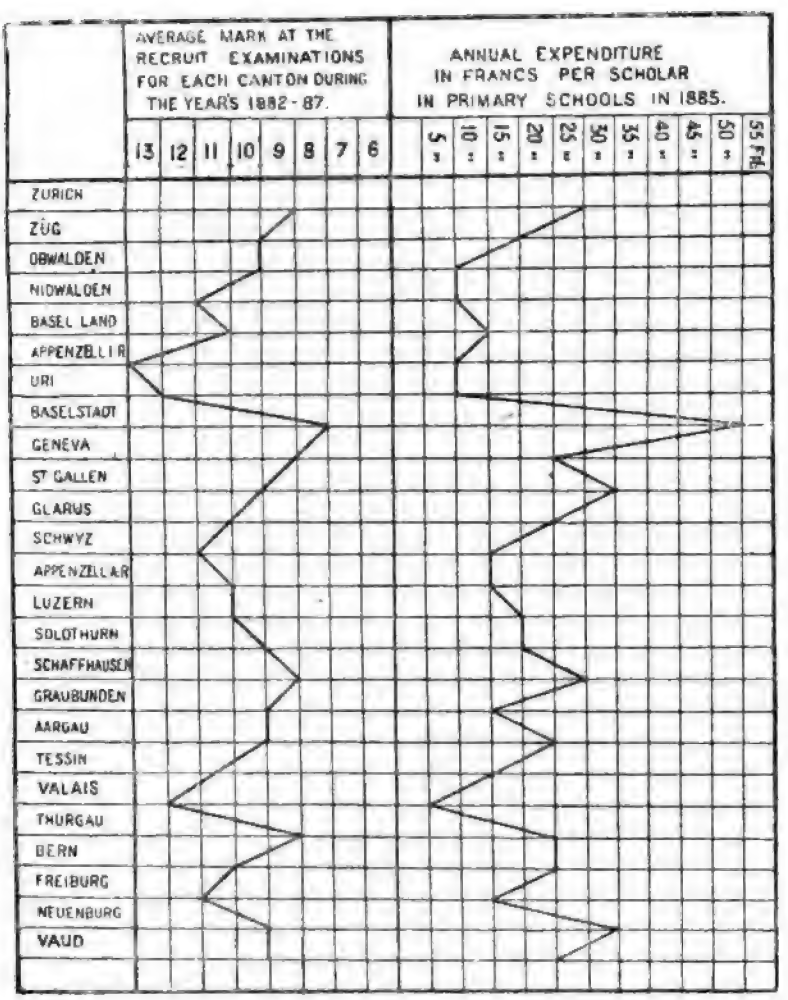
E.—Detailed description of the educational arrangements of a small rural Swiss Commune, from notes taken on the spot, and detailed comparisons with similar English circumstances - - - - - 73

F.—Details of comparison between Swiss and English Expenditure on Education - - - - - - - - - - 78

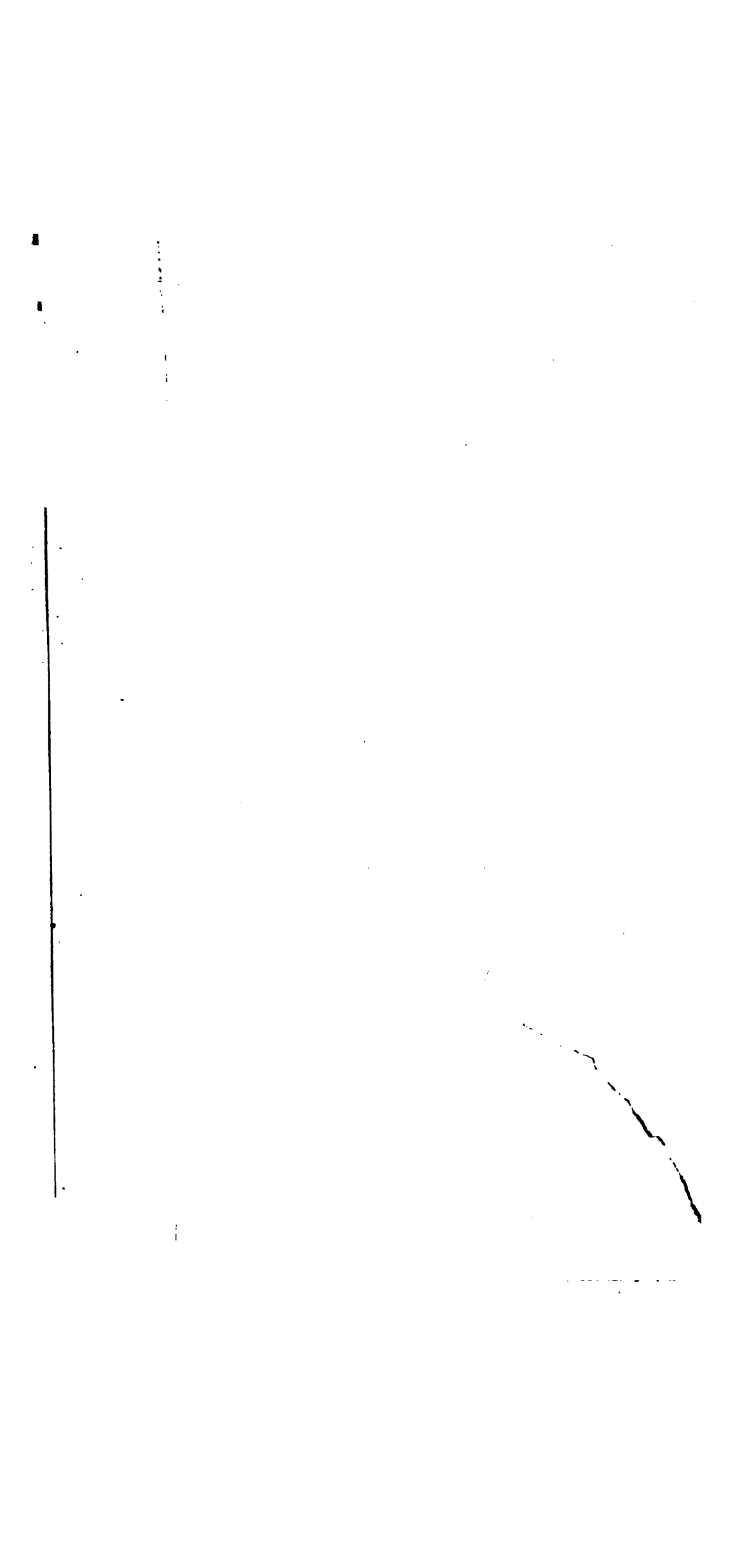
G.—Bibliography of Swiss education - - - - - - - - - 82

APPENDIX A.

CHART SHOWING APPROXIMATELY THE RELATION OF EXPENDITURE TO EXCELLENCE IN SWISS PRIMARY EDUCATION.



Note.—The above figures do not show the expenditure on Primary Education of the present day, but of thirteen years ago; but this does not invalidate the apparent causal connection between expenditure and permanent results.



OF

EXPLANATIONS.

APPENDIX D.

EDUCATIONAL STATISTICS of BERN CANTON and Comparison with an ENGLISH COUNTY of the same size, in 1894.

	£	£ Of these sums the Bund provided
1. Total Cantonal Expenditure by the Education Department on Education of all grades, excluding Technical Education	131,074	—
2. Total Communal Expenditure, excluding Technical Education	169,166	—
3. Combined Cantonal, Communal, and Subscription Expenditure on		
Industrial Education	19,698	4,221
Agricultural	827	413
Dairy	642	321
Commercial	1,058	360
Courses of Commercial Societies and Bodies	461	85
Special Courses, and Travelling	267	133
[Total Expenditure on Technical, £22,953.]		
4. Grand Total of Cantonal and Communal Public Expenditure on Education	£323,193	£5,533

COMPARISON between BERN CANTON and the COUNTY of GLOUCESTERSHIRE (including BRISTOL and GLOUCESTER).

Gloucestershire.	Bern Canton.	—
1,714,763	1,701,583	Area in acres.
548,886	539,305	Population.
535	853	Number of Public Primary Schools.
96,076	99,385	,, Pupils in them.
176†	161‡	Number of Schools, Public and Private, other than Primary, Technical and Evening Schools.
10,847	11,560	Number of Pupils in them.

† This figure is only approximate in the case of Gloucestershire; it is taken from the Schools Return C. 8,634, obtained by the Education Department in 1897; it probably does not include quite all the private schools in Gloucestershire. The presence of Clifton and Cheltenham Colleges, which are largely non-local schools (drawing boys from a larger area than does the Gymnasium in Bern) also somewhat vitiates the comparison. Of these 176 Schools, 139 are private, 7 are maintained by Subscriptions, 4 by a Company, and 26 are Endowed Schools.

‡ Of these 161 Schools, 79 are private, nearly all of these being Kindergarten*, 82 are maintained by Local Authorities; most of these 82 have a permanent Capital Fund.

* No Infant Schools are provided from public funds in Bern Canton; 6 is the lower, and 15 the higher age limit in the public primary Schools. It is preferred that little children should be kept under *home* influences as far as possible, up to six years of age. It is only in large towns, where overcrowding exists, and mothers are so often out at work all day, that infant schools are at all encouraged.

APPENDIX D.—*continued.*

COST OF PUBLIC EDUCATION IN BERN CITY. [Population about 57,000.]

	Gymnasium (Classical & Modern). Age, 10—18.		Boys' Sekundar Schule. Age, 10—15.		Girls' Sekundar Schule. Age, 10—15.		Primary Schools. Age, 6—15.		
	1880.	1895.	1880.	1895.	1880.	1895.	1860.	1880.	1895.
	£	£	£	£	£	£	£	£	£
(a) Total annual maintenance expenditure	3,820	7,560	1,560	3,560	2,040	5,040	2,200	8,400	14,880
		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
(b) Average annual maintenance expenditure per pupil in the schools*	?	12 7 0	6 16 0	8 10 0	4 13 0	6 15 0	0 17 4	2 2 5	2 18 9
	£.	£	£	£	£	£			
(c) Total of local expenditure, *i.e.*, of (a) after deducting receipts from cantonal grants, from federal grants, and from fees	1,380	3,416	740	2,060	720	2,440	?		

* None of these are Boarding Schools.

APPENDIX E.

Detailed Description of the Educational Arrangements of a Small Swiss Commune, from Notes taken on the Spot; and Comparison with Similar English Circumstances.

Circumstances.

The Commune, B, has a population of 810, all Protestants; it is about eight miles distant from a large city, the capital of the Canton. B itself is an agricultural village, but some of the men go to work daily in the neighbouring capital as bricklayers and unskilled labourers, and others work in a factory in a neighbouring valley, where there is water power. The greater number, however, work on the land; there are a few owners of large farms.

Communal Council.

The Communal Council, or Einwohner Gemeinde Rath, **has 5 members.** It meets at least once a month, and sometimes as often as thirty times in a year. All the 5 members this year are well-to-do farmers. They are elected by the inhabitants every two years; they are generally re-elected, partly because there are hardly any other capable educated men available. The president, a farmer in a small way, inherits his land from many generations back; he can speak French and German equally well, and read English a little; he has, when younger, lived on a farm in America (working his passage out and back, and working there for his keep), in order to learn the use of farm machinery and new methods. He is keenly interested in current events, takes a scientific interest in farming, and closely watches political and social developments in his Canton and in Switzerland generally. He and his family live by their farm, and work on it.

There is a paid clerk to the Communal Council (Gemeinde Schreiber). At present the office is filled by the Head Teacher of the School; he is the best, if not the only, man in the village available for the work, and possessing sufficient knowledge of accounts and other matters. The duties are believed to interfere but little with his school duties. The sanction of the Education Department is obtained for this arrangement. He keeps the Council Minutes, and the accounts of all Communal expenditure.

Communal Rates.

This Council, or Gemeinde Rath, has charge of all Communal matters, it fixes the rates and collects them. It also collects the Cantonal taxes, which it forwards to the capital without passing them through the Communal accounts. During the present year the rates were :—*

A.	Grund Steuer	3·50	per mille,	Communal,	and	3·50	per mille	Cantonal
B.	Kapital Steuer	3·50	„	„	„	2·00	„	„
C.	i. Einkommen St.	5·25	per cent.	„	„	3·00	per cent.	„
	ii. „	0	„	„	„	4·00	„	„
	iii. „	8·75	„	„	„	5·00	„	„

Incomes below 24*l.* are free, and 24*l.* may be deducted from income before calculating the tax.

The A communal tax produced about 144*l.*, the B tax 12*l.*, and the C taxes 40*l.* during last year, and about 38*l.* were received from other revenues.

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* See page 49 in foregoing Memorandum, for explanation of this table of Rates and Taxes

Assessment. There is a Steuer Kommission of 5 members nominated by the Commune, for assessment purposes. They do not possess powers of compulsory investigation, but they can assess at whatever figure they think proper, and anyone desiring to protest must produce all books, &c., and other proofs before them.

School Commission. There is a *Schul Kommission* of 5 members, elected every two years, and generally re-elected, to whom is entrusted the direct management of the school, its supervision, choice of teachers, keeping note of school attendance, etc., etc. It spends the money provided for it by the Communal Council (it does not settle this amount; that is decided by the Communal Council, together with the Cantonal Grants and the proceeds of the Schulfonds or permanent school fund. The President of the Communal Council is a member of the Schul Kommission; often there are other members common to both bodies, so that the Schul Kommission has ample opportunity for making its needs known on the Council, and for securing due recognition and supplies, in comparison with the other calls on the Communal purse. Three members of this Schul Kommission this year are farmers, one a manufacturer and dealer in tobacco, whose place of business is outside the Commune, and one a working man who works at a silk factory in a neighbouring place. The Secretary is one of the teachers. During last year the Kommission had the disposal of some 250*l.* in all for educational purposes.

Relation to Communal Authority.

Personnel. The school teachers are appointed (with the sanction of the Education Department) for six years, after which they can be re-appointed. They may at any time leave by giving one quarter's notice.

School organisation. The school has about 140 children, and two masters and one mistress, all trained and certificated; no pupil-teachers. The nine school years are thus divided amongst the staff:—

(*a*) *Unterschule*, 6 years old to 9 years old, taught by the Mistress, who also takes the girls' Arbeit Schule, for manual work, which is separately organised and paid.

(*b*) *Mittelschule*, 9 years old to 12 years old, taught by a Master, who also takes the adult courses out of school hours, which are separately organised and paid for.

(*c*) *Oberschule*, 12 years old to 15 years old, taught by the Head Master, who is also the Gemeinde Schreiber.

Teachers' salaries.

(*a*) The salary of the Mistress is 775 francs from the Commune, and, as she has done ten years' service, 500 francs from the Canton. She also receives 150 francs from the Commune, and a similar sum from the Canton for taking the girls' manual training.* A house is provided her, with 105 francs in lieu of firewood and 40 francs instead of garden, making a total of about 51*l.* and a house.†

(*b*) The Assistant Master receives 790 francs from the Commune, and, as he has done more than 6 years' service, 650 francs from the Canton. He also receives 120 francs from the Commune and 120 francs from the Canton for conducting the adult courses. He is provided with a house, and the same allowances as (*a*), making a total of about 58*l.* and a house.†

(*c*) The Headmaster receives 790 francs from the Commune and 800 francs from the Canton. He also has a house and garden and fuel provided. His pay as Gemeinde Schreiber is small; it of course does not figure in the Schul Kommission account.†

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* The Girls' Arbeit Schule meets twice a week in winter and once a week in summer, making a minimum number of 44 hours in each year.

† Each teacher will, on retirement, draw a pension proportionate to length of service, from a fund maintained partly by Cantonal contributions and partly by teachers' contributions payable at a certain rate by all beneficiaries who elect to come in to the scheme. It is open equally to primary and secondary school teachers,

The total of all salaries paid by the Commune reaches about 180*l.* The Cantonal Grants for salaries are in some places paid direct to the teachers, and do not pass through the Communal or the school accounts.

Compulsory attendance.

A register of attendance is kept by each teacher, and at the end of each month the total of absences (not excused) of children between 6 and 15 years old is forwarded by the Schul Kommission to the Cantonal Polizei Direction in the neighbouring town; they in turn set in motion the policeman in the Commune (he is appointed by and is the servant of the Canton), and the fine is claimed, or a summons to the County Court is presented, as the case may be. By a recent change in the law the penalties have been made much more severe than before.* The same process is followed also in the case of the adult courses, which, if the Commune decides to have them at all, must be compulsory. For these the fine is 20 cents for each hour missed. It is true a young workman can earn more than this sum during the hour missed; but there are court fees in addition, and fees are cumulative, and there is the nuisance of going to the court in the town during work hours, so that the compulsory system is very fairly effective. The Registers are scrutinised regularly by the Communal Schul Kommission and by the Cantonal Schul Inspektor.

School times

From April 1st to August 31st in each year the school is only open in the morning, the afternoon being needed for field work. September and October are holidays. From November 1st to March 31st the school is open from 8 a.m. to 11 a.m., and from 1 p.m. to 4 p.m. These two periods give practically two sessions of 130 days each, if Sundays be excluded. The school must be open for a minimum of 900 hours for the whole year by the Cantonal regulations, and the Cantonal Grant is then given in full. Thus there is still plenty of scope for shortening the hours during which school is open, during special seasons, even for long periods, without falling below the minimum required by the Central Authority. The latter is very careful to sanction special arrangements for the convenience of agricultural districts. Irregular attendance or a small attendance of children does not lessen the grant, because (it is urged) the school costs just as much to maintain whether the children are regular or irregular, and the regularity of attendance is a matter for police measures (so to say), whereas the Cantonal Grant is for educational objects, and to secure educational efficiency whenever the school opens its doors.

Adult classes

The adult course is for lads from 17-19, mainly in preparation for the recruits' examination. It is held on Saturday afternoons (for 3 hours) for twenty weeks from November to March. In some years for 15 weeks, with 4 hours each day. Sixty hours is the minimum yearly number. After much experiment, the afternoon has been found best, as in the evening the men come, after leaving work, either very tired, or, if after working in the town, somewhat muddled with drink.

Number of children.

At my visit in 1897 there were from 135 to 140 children in this Primary School, thus arranged:—

i. In the *Unterschule* (6-9 years old), 20 boys and 34 girls, under one Mistress, but taught in three classes of 13, 18, and 23 respectively. Promotions are, as a rule, yearly. They are at the teacher's discretion; no premiums or penalties attach to reaching or not reaching certain standards by certain times; neither grants of money to the school nor exemptions from attendance for the children are affected thereby, so that there is no temptation to make promotions on any other grounds than the educational fitness and benefit of the child.

Classification

ii. In the *Mittelschule* (9-12 years old), 46 children under one Master, but taught in 3 classes of 18, 10, 18, respectively.

iii. In the *Oberschule* (12-15 years old), 35 children, under one Master, but taught in 3 classes.

Boys and girls over 14 are allowed absence twice a week during certain months to attend confirmation classes at the Pastor's house. With this exception attendance is compulsory up to 15 years old.

* When a child is constantly absent, it is the parents who are called and fined or imprisoned (as the case may be), not, as sometimes with us, the children who are sent to Truant Industrial Schools.

Finance.

THE FOLLOWING IS THE BALANCE SHEET OF THE SCHUL KOMMISSION —

Received.	Francs.	Paid.		Francs.
Balance from last year	62	Upkeep of house and buildings, viz., Fire Insurance	29	
By Schulfonds: Rent received from premises, 268 francs; Interest on Capital 111 francs	379	Repairs	76	
		Heat and Light	249	
				855
Received from Communal Council	3000	Interest on building debt		270
Received from Canton (Cantonal Grants to Teachers not reckoned):		Salaries (Communal only)		2,465
as Extraordinary Grant to a Necessitous Commune	700	Girls' Manual Training		150
for Adult Course	60	Books and Apparatus		191
for Books and Apparatus	38	Library		40
	798	Expenses of Schul Kommission		57
		Tax on Schul Fonds payable to Canton		2
		Sundries, *e.g.*, wood, advertising, food for poor children in winter		174
		Accountant		35
Total	4239	Total		4,239

Adding Cantonal contributions to salaries (1,950 francs) we have a total expenditure of 6,189 francs, or about £247 10s., for a school of 140 children, *i.e.*, about 37s. 4d. per child, in this rural school.

THE FOLLOWING IS THE TOTAL EXPENDITURE OF THE COMMUNAL COUNCIL :—

	Francs.	
General Administration	610	for General Purposes £104.
Poor Relief	1,165	
Police	217	
Buildings, Highways, etc.	303	
Contribution to the Church Board	160	
Interest on Debt	63	
Insurance	26	
Accountant	56	
Sundries	25	
Handed to Schul Kommission for School purposes	3,000	for Education purposes £129
Later extra Kommission	266	
Francs	5,881	

APPENDIX E.—*continued.*

COMPARISON WITH FIVE SIMILAR ENGLISH PLACES.

R. is a village near a big town in a South-Eastern horticultural district, with a School Board.
W. „ „ „ „ a Northern manufacturing district, with a School Board.
K. „ „ „ „ one of the Home Counties. It possesses a School Board.
C. „ „ „ „ the North-west of England, agricultural district, without a School Board.
M. „ „ „ „ a Midland county, agricultural, without a School Board.
A. is the average of the above five schools.
B. is the Swiss school just described, in a village about eight miles from a large town.

	B. A Swiss Village.	Average of Five English Villages.	M.	C.	K.	W.	R.
Population	800	779	750	902	581	844	818
School Board Rate	—*	*d.* 11·9	—	—	*d.* 16·5	*d.* 13·5	*d.* 5·9
Original Cost of School Building†	£650	£1,638	—	—	£1,200	£2,016	£1,609
Children on Register—							
Infants	0‡	37	50	23	24	45	45
Between 6 and 10 years old	54	78	106	87	57	76	67
„ 10 „ 12 „	50	36	43	47	27	40	22
„ 12 „ 14 „	28	17	13	33	14	13	13
Over 14 years old	7	1	1	3	0	0	1
Number of children, exclusive of infants	139	132	163	170	98	129	103
Staff— (M.—male ; F.—female ; C.—certificated ; P.T.—pupil teacher)	1 M.C. 1 M.C. 1 F.C.	1 M.C. 1 F.C. 1 F.	1 M.C. 1 F.C. 1 F.	1 M.C. 2 F.C. 1 F.	1 M.C. 1 F.C. 1 F.	1 M.C. 1 M. 2 F. 1 P.T.	1 M.C. 1 F.C. 1 F.
Salary of Head Teacher	£66§	£120	£130	£126	£117	£100	£129
Total Spent on Salaries	£182§	£238	£283	£294	£161	£256	£190
Total Expenditure of School	£247	£318	£380	£368	£291	£320	£232
Share of Locality	£137, or 56 %	£109, or 35 %	£106, or 28 %	£110, or 30 %	£97, or 33 %	£140, or 44 %	£94 or 40 %
Share of Central Authority	£110, or 44 %	£208, or 65 %	£274, or 72 %	£257, or 70 %	£194, or 67 %	£180, or 36 %	£138 or 60 %
Total Expenditure per Child	*s. d.* 37 4	*s. d.* 37 8	*s. d.* 35 8	*s. d.* 38 9	*s. d.* 47 8	*s. d.* 36 7	*s. d.* 31 4

* *See* foot of page 73.

† The building of the Swiss School was admirable in every respect. The youngest class was in a large room on the upper floor, with large windows on two sides, and plenty of light from left and right. The middle school was in a large room on the ground floor, and the upper school in a still larger room also on the ground floor; both these had windows on two sides. Each teacher had therefore a room to himself. The elder girls, under supervision of the mistress, do some of the tidying of the rooms; the boys help also in several matters.

‡ There are no infant schools in Switzerland except in the large towns, where they are necessitated by the number of women who leave their homes for work. They are considered, at best, but a necessary evil; the proper age for a child to begin school being held to be six years. It is noticeable that the number of scholars over 10 years old is 85 in the Swiss rural school, but only 54 in the average of the English schools; yet neither parents nor employers complain of the interference of school attendance with employment in the Swiss village: perhaps partly because of the special arrangements of school opening during certain seasons.

§ With house, fuel, and garden and nearly always a pension. See footnote, page 74.

APPENDIX F.

Educational Expenditure in England and Wales.

In the Financial Table of Educational Expenditure in Switzerland and in England, which faces page 61 in the foregoing Memorandum, there are various points which require elucidation if misconceptions are to be prevented.

The records of English expenditure on public education are so complicated, so varied, and so difficult to collate with any completeness, still more to classify under headings, that the figures must not be considered strictly complete. The following explanations may serve to show both the limitations of the table and the complexity of English Educational Administration.

The Figures are for 1895.

In column (7), *Technical Education*, there is included :—

On line (*a*) the Rates in Non-County Boroughs and in Urban Districts which are spent on Technical Instruction. *Vide* Technical Education Return, 1896, No. 357.

On line (*b*) the Rates in Counties and in County Boroughs (about 36,650*l.*) and the Local Taxation Customs and Excise funds (*i.e.*, Whisky Money) devoted to Education in 1895. *Vide* No. 357.

On line (*c*) there is

(i) 169,238*l.* Science and Art Department Grants for Science and Art Teaching in all sorts of schools and classes. *Vide* C. 7941, pp. 180 and 187. This cannot be completely classified under proper educational heads.

(ii) 39,900*l.*, being the share proportionate to England and Wales in the sum of 47,402*l.*, for administration of the Science and Art Department (excluding Museums). *Vide* C. 7941, p. lxvi.

(iii) 76,500*l.*, being the share proportionate to England and Wales in the sum of 84,086*l.*, for Inspection and Examination expenses of the Science and Art Department. *Vide* C. 7941, p. lxvi.

(iv) 7,000*l.* in Central Grants to Agricultural Education in England and Wales.

All these sums, both in (*a*), (*b*), and (*c*), include several sums which properly come under Evening Continuation Schools, and others under Higher Primary Schools, which ought to be in column (3), and others which come under Middle and Secondary Schools and ought to be in column (5), and others to University Colleges, and so ought to be in column (6). But the accounts of

these several items cannot be disentangled. It is possible, too, that there are some sums under all these heads which are not entered at all.*

In column (6), *Universities*, the items on lines (*a*) and (*b*) cannot be discovered. Those on line (*c*) are:—

2,000*l.* for Victoria University. *Vide* Treasury Estimates.
3,000*l.* for Wales ,,
15*l.* for London ,,
15,000*l.* for University Colleges in England.
12,000*l.* for ,, ,, Wales.

In column (5), *Secondary, Higher, and Middle Schools*, we have given on

line (*a*) the few sums that were entered in the Technical Return No. 357 as having been given from Non-County Borough Rates to Secondary Schools;

line (*b*) is from information from the same source in regard to the Whisky Money in Counties and County Boroughs. It includes the direct grants made to Secondary Schools, and the amounts given in Scholarships tenable at Secondary Schools, so far as these can be calculated; and also the local grants to Intermediate Schools in Wales;

line (*c*) is from the Treasury Estimates, and represents the 1895 Grants to Intermediate Education in Wales. There ought also to be entered here some money now classified on line (*c*) of column 7, but the accounts cannot be separated.

In column (4), *Training Colleges*,

on line (*a*) there is probably little, if any, expenditure, and no records, unless we were to include School Board expenditure on Pupil Teacher centres.

on line (*b*) it is impossible to discover the accounts of the expenditure by local authorities on training of teachers, though there is no doubt that many counties and county boroughs maintain classes for teachers. There is, of course, the sum of 38,696*l.* from Voluntary Contributions, etc., *vide* C. 8249, p. 255; but these are not funds of local authorities, and therefore are omitted here, though they would have to be included if we were calculating *total* expenditure on education in England.

on line (*c*) we have included 100,227*l.*, *vide* C. 8249, p. 254, and 9,213*l.*, *vide* C. 7941, p. 223.

* Much valuable information concerning educational expenditure in 1896 will be found in the July and October numbers of the *Record of Technical and Secondary Education*. Macmillan and Co., 1898. Unfortunately it did not appear in complete form in time to be used in the compilation of the figures in this Memorandum.

In column (3), *Higher Primary and Continuation Schools*, it is impossible to disentangle from the figures in column 7 the complete expenditure on evening schools and continuation schools, by authorities other than School Boards; while the published Returns of School Boards do not separate their evening school expenditure and higher Primary expenditure from that given in column (2). Moreover, no account could have been here given of the total of Voluntary Contributions towards this grade of education (supposing the table had included such sums), for no account exists.

In column (2), *Primary Education*,

on line (*a*) there is included 3,987,790*l.* from School Board Rates. *Vide* C. 8179, p. 516. This does not include expenditure from actual loans made during the year; *e.g*, on buildings. It does include some expenditure on Industrial Schools, and on administration;

on line (*b*) there is probably no expenditure. It is, in fact, forbidden by 1. (1) (*a*) of the Act of 1889. The School Board expenditure is on line (*a*);

on line (*c*) we include

180,801*l.* Science and Art Department Grants. C. 7941, p. 223.

254,146*l.* Education Department Inspection and Administration. *Vide* Treasury Estimates, p. 331; and

6,232,750*l.* Education Department Grants of all kinds to Elementary Day Schools. C. 8249, p. xliii.

In column (1) none of the totals can be considered complete in view of the above explanations.

It must be remembered that Endowments and Voluntary Contributions have not been included; the objects of the table being to show

(i) how much England and Switzerland respectively are willing to rate and tax themselves for the maintenance of Education out of the *public purse*, and

(ii.) in what proportions these public funds have been allotted respectively to primary, to secondary, and to technical education, in the two countries; and to demonstrate that any excessive expenditure, whether from local or from central funds, on any one grade is gained at the cost of serious diminution in some one or more of the other grades.

APPENDIX F.—*continued.*

The following figures may serve as a corrective to some of the errors in the figures in the Financial Table, page 60. They give, as clearly as is possible, the total estimated expenditure on Education in England and Wales from State funds alone, for 1897-8, according to the Treasury Estimates (see pages named below). It must be remembered that this Account does not include the large sums spent on public education from voluntary contributions and endowments, nor some five millions sterling from *local* public funds.

ESTIMATED TOTAL STATE EXPENDITURE ON PUBLIC EDUCATION, of all grades,* in England and Wales, from the National Exchequer only, estimated for 1897-8.

Education Department	£8,188,120
Science and Art Department	329,591
The Treasury	62,069
The Board of Agriculture	7,150
The Board of Trade	0
Grand Total *	£8,586,930†

EDUCATION DEPARTMENT.

Administration and Inspection, p. 327, A.B.C.D.N.O.P.R.S.	£297,486
Public Elementary Schools, p. 327	£7,573,884
Evening Continuation Schools, p. 327	£154,815
Primary Training Colleges, p 327	£161,935
	£8,188,120

THE TREASURY.

p. 369. Intermediate Education in Wales		£19,794
Total for Universities thus apportioned:—		
p. 369. Victoria	£2,000	
p. 373. London	10	
p. 369. Wales	3,265	
p. 369. English University Colleges	25,000	
p. 369. Welsh do.	12,000	
		£42,275
		£62,069

THE BOARD OF AGRICULTURE.

Grants to various Institutions for Higher Agricultural Education in England and Wales	£7,150

SCIENCE AND ART DEPARTMENT.

Administration and Inspection (excluding Museums), pp. 332, 342, 343	approximately	£90,000
Public Elementary Schools, p. 342		£47,510
Evening Continuation Schools, p. 342		£3,610
But a considerable sum should be also entered here from the Science and Art Classes below.		
Primary Training Colleges, p. 342		£12,050
Science Education, pp. 332, 335.		
D 1, Science Schools and Classes	£155,500	
B and M, The Colleges of Science	£25,531	
D 4, 5, Science portion, say‡	£6,825	
Total for Science		£187,856
Art Education, p. 332.		
D 2, 3, Art Schools and Classes	£70,400	
C, The College of Art	£7,935	
D 4, 5, Art portion, say‡	£6,825	
Total for Art		£85,160
Total Science and Art Department for the whole of the United Kingdom		£426,196
Approximate portion of this sum which may be attributed to England and Wales, according to population		£329,591

NOTE.—The pages named above refer to the printed Estimates for 1898-9, No. 57. The amounts given in the Table on page 60 are those of the money actually spent in 1895.

* Exclusive of certain expenditure on Army and Navy Education by the War Office and the Admiralty.

† Of this eight and a-half millions, barely half a million is for Education other than Primary.

‡ D. 4. Scholarships, Local Exhibitions, and Prizes £10,950
D. 5. Grants for Examples 2,700

APPENDIX G.

BIBLIOGRAPHY OF SWISS EDUCATION.

Books marked * may be consulted at the Education Department Library, Whitehall.

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* "Jahrbuch des Unterrichtswesens in der Schweiz, 1886-94." Von Dr. Albert Huber. Zurich, 1896. 8 vols.

* Receuil des Monographes Pedagogiques." Published for the Geneva Exhibition of 1896.

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* "Graphisch Statistischer Atlas der Schweiz." 1897. Stämpfli et Cie, Bern.

* "Statistisches Jahrbuch der Schweiz." 1896. Orell Fussli, Zurich.

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* "Schweizerisches Volkschulwesen." Von Rudolph Dietrich. Behrend, Wiesbaden. 1896.

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* Catalogue Special du Groupe, 18 A. 1 à l'Exposition de Genève."

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* "The Swiss Confederation." By Sir F. O. Adams and C. D. Cunningham. McMillan. 1869.

* "Social Switzerland." By W. H. Dawson. Chapman and Hall. 1897.

R. L. MORANT.

October, 1898.

PROBLEMS IN PRUSSIAN SECONDARY EDUCATION FOR BOYS,

WITH SPECIAL REFERENCE TO SIMILAR QUESTIONS IN ENGLAND.

"The intervention of the State becomes especially necessary in superior instruction, because here the body of public opinion, educated enough to discern what is wanted, gets smaller than ever, while the importance of organising your instruction well and committing it to first-rate men becomes greater than ever."

[From Mr. Matthew Arnold's Report on Secondary Education in Foreign Countries, prepared for the Schools Inquiry Commissioners in 1866.]

"The really essential matter in education is the teacher's love for his work and sympathy with his pupils. This it is which awakens life and power in their minds. Schemes of study cannot do this; curriculum and method cannot do it; the most perfect method, the finest and most inspiring subject-matter, are dead things in themselves. Still less can State supervision or control accomplish it. It is the personality of the teacher that does it. It is the teacher inspired by his work who knows how to awaken in the human mind the innate desire for whatsoever is true and good and fair. But, in order that this may happen, the first condition is liberty. Freedom and spontaneity are the essence of spiritual life. Freedom, therefore, is the breath of life of the school. Without it, neither teaching nor learning can prosper."

[From the dedication of Professor Friedrich Paulsen's *Geschichte des Gelehrten Unterrichts auf den deutschen Schulen und Universitäten.* (2nd Edition 1896).]

"This purifying of the wit, this inriching of memory, enabling of judgment and enlarging of conceit, which we commonly call learning, under what name soever it come forth, or to what immediate end soever it be directed, the final end is, To lead and draw us to as high a perfection as our degenerate souls, made worse by their clay lodgings, can be capable of, . . . the ending end of all earthly learning being vertuous action."

SIR PHILIP SIDNEY (*The Defense of Poesy*).

ANALYSIS OF CONTENTS.

I.—Introduction (pp. 87-90).

II.—Sketch of the history of the reorganisation of secondary education in Prussia, 1808-1818. Its place as part of a general reconstruction of the State after the battle of Jena. The work of Wilhelm von Humboldt and others. How far facilitated by the earlier legislation of 1722 and 1787, and by the Allgemeine Landrecht of 1794. The chief features of the reorganisation of 1808-1818. The establishment of the Educational Council, and of Provincial Boards of Inspection (pp. 91-94).

III.—Contrast between the Prussian and English attitude towards State control in higher education. The influence of Adam Smith and of the theory of *laissez-faire* on educational opinion in England at the beginning of the present century. The relation of Wilhelm von Humboldt (1) to the theory of free development and (2) to State interference in secondary education (pp. 95-97).

IV.—The further development of State control of secondary education in Prussia. Note on the history of the "leaving examination" (pp. 97–101).

V.—German opinion as to the range of influence of secondary schools. In what sense is secondary education a factor of immense importance in national welfare (pp. 101-103).

VI.—Unrest in Prussian secondary education. The great petition of 1888. The Royal Decree of 1889. The Conference on Secondary Education held at Berlin, under the presidency of the Kaiser, in December, 1890. Character of the Conference. Its importance. The Kaiser's address. The chief conclusions of the Conference (pp. 103-112).

VII.—Movements in German opinion with regard to the aim, methods and organisation of secondary schools. Professor Paulsen, Dr. Wiese, Dr. Paul Cauer, Dr. Hugo Göring, Herr von Massow, and Dr. Gustav Rümelin quoted as representing various aspects of criticism (pp. 112-120).

VIII.—Contrast between English and Prussian secondary education, with special reference to (1) the principles of promotion of boys from class to class in the school; (2) the length of time covered by the school course: (3) the influence of the "certificate for one year's military service"; commercial effects of this; comparison of English and German advertisements for clerks; (4) internal organisation of the classes in the schools; the "school year" and the "term" compared as units. Note on the history of the "standards" in English public elementary schools. Mr. Matthew Arnold's advocacy of their development on German lines (pp. 120-132).

IX.—The intellectual aim of secondary education as understood in Prussia. German definition of the constituents of the "general knowledge" expected as the normal result of a liberal secondary education. The English point of view contrasted with the German (pp. 133-135).

X.—The English tendency to lay stress on the ethical, rather than on the purely intellectual, influences of secondary education. Effect of this tendency is to produce a variety of secondary schools, with certain differences corresponding to the religious convictions or ethical preferences of parents. Note on the alleged effect of different kinds of school studies, and of differences in the point of view of the teachers, on the attitude of the pupil's mind towards a variety of controverted questions. The apparent limits of neutrality or compromise in this aspect of secondary school work (pp. 135-143).

XI.—The growing need, in consequence of industrial and other changes, for more knowledge in the various branches of professional and commercial life. The bearing of this on the general secondary education of persons intending to apply themselves to higher technical studies. The influence on German culture and on German trade of persistent endeavours to raise the average level of general secondary education. Economic aspects of facilities for systematic combinations of expert knowledge and industrial enterprise. The possible dangers (1) of impairing individual initiative: (2) of selecting the wrong ingredients of "general education" and (3) of inducing over-pressure or satiety of interest. Germans alive to these dangers (pp. 144-150).

XII.—Historical sketch of the curricula in Prussian secondary schools:—

(1) Development of the day-school as the dominant type of secondary school in Prussia since 1808. The old German boarding schools; their influence, tradition and public service. Their decline in public estimation towards the end of the 18th century. Reasons for this. Development of opinion in favour of day-schools. Pestalozzi's insistence on a close connection between home and school. German love of home life. Desire of the reformers of Prussian secondary education in 1808 to bring education of a high quality within the easy reach of the middle class. Contemporary movement in England against public secondary boarding schools. Failure of that movement to establish public day schools. Later reform of the great English boarding schools—Butler, Hawtrey, and Arnold. Consequent divergence in the course of development of secondary education in England and Prussia. The conversion of many Prussian "grammar schools" into fully-equipped local classical schools.

(2) Süvern's Lehrplan of 1812. The Prussian reformers of secondary education sought to secure thoroughness and concentration in school work, and to train up citizens of independent character. Their consequent zeal for Greek literature and history as an important element in the curriculum. Influence of Winckelmann, Goethe, and Schiller. Contemporary English feeling. Influence of Greek studies on German schools, culture and ideas of State action. Exaggerated hopes of some of the advocates of Greek studies in Prussian secondary schools, 1808-1818. Note on contemporary proposals to teach Greek before Latin.

(3) Effect of the new curriculum in raising the standard of secondary education in Prussia. Reaction against Greek. Gradual growth of the demand for "modern" education. Attitude of the Prussian Education Department. Struggle between the purely utilitarian and the more liberal conception of a "modern" secondary school. Spilleke's work and influence (1822). Provisional regulations for higher schools and Realschulen (1832). Antagonism of the advocates of classical education to the conception of "modern" secondary training. Fuller recognition of the latter by the Prussian Government in 1859. Changes in 1870 and 1879. The re-classification of Prussian secondary schools in 1882. Ampler recognition of non-classical secondary schools. The semi-classical secondary schools first named Realgymnasien in 1882. Revised curriculum appointed for the fully classical schools (Gymnasien) in 1882. Subsequent controversy and unrest. The new curricula for all types of secondary schools in Prussia, published in 1891. Table showing number of scholars in the different types and grades of Prussian secondary schools. Numerical and social primacy of the fully classical schools still maintained (pp. 151-167).

XIII.—The educational effects of a definite classification of secondary schools according to their curricula and to the length of their normal course. Dr. Gow quoted. Mr. Tucker's argument for complete *laissez-faire* in school studies. The difficulties of such a plan. The bearing of the existence of endowments for secondary education on theories for the non-interference by the State with secondary schools. The views of Mr. Edward Miall and Mr. F. D. Maurice on this point. Mr. Herbert Spencer's view as to the fundamental importance of questions of curriculum. Reasons why it has been easier for the Prussian Government to establish and maintain a definite classification of secondary schools according to their curricula and courses of study than would be the case in England; (1) differences in the educational development of the two countries during the important period covered by the last ninety years; (2) the State organisation of the professions; influence of compulsory military service; State control of universities and the higher technical schools; (3) the Prussian system almost entirely a system of day secondary schools; our non-local boarding schools draw away important parts of the supply of pupils from the local schools (pp. 168-178).

XIV.—The contrast between day schools and boarding schools, and its bearing on Prussian, as compared with English, secondary education. Some resultant differences in the special interests of the masters in Prussian and English secondary schools. The system of self-government by Prefects in secondary schools. Athleticism (pp. 179-189).

XV.—The advantages and the dangers of having a formula for the "general education" to be required as the normal outcome of each type of secondary school. Dr. Rümelin's comments on the conditions of work in the German classical schools as compared with an earlier state of things. Professor Paulsen's theory of the cause of alleged "over-pressure." The practical effects of the dominant idea of "Allgemeine Bildung." How far are these inevitable under the conditions of modern life and of international competition in trade (pp. 189-199).

XVI.—The signs of a new tendency in Prussian secondary education towards combinations of the classical and non-classical curricula in single schools:—

(1) The combination at Altona of a Realgymnasium with a Realschule. History of Dr. Schlee's experiment. Details of the curriculum (pp. 200-205).

(2) The combination at Frankfurt-am-Main of a Gymnasium, and a Realgymnasium, with the three lowest classes of a Realschule. The unification of these three types of secondary school for a period co-extensive with the first three years of secondary school life. Details of the curricula. Dr. Reinhardt's aim. An attempt to save classical education from possible dangers. The postponement of Latin to the age of twelve. French as the first stage in linguistic discipline in classical schools (pp. 205-212).

(3) Suggested changes in the curriculum of the three highest classes in the Oberrealschule. Proposals for introducing into the highest classes of non-classical schools some infusion of classical history and literature, either (1) by the use of good translations from the classics or (2) by permitting optional instruction in Latin and even in Greek.

The teaching of modern languages in non-classical schools. Imperative need of stress on the study of grammatical forms.

The introduction of the new methods of modern language teaching into classical schools. Description of an English lesson at the Wilhelms-Gymnasium at Hamburg. Dr. von Helmholtz's testimony as to the value of the old classical training. The importance of retaining the study of the classical "humanities" in a liberal education.

Special difficulties which might arise in the highest forms of purely non-classical schools, owing to elements of controversy latent in parts of the necessary subject-matter of instruction (pp. 212-230).

XVII.—The passage of promising boys from the elementary to the secondary schools.

The scheme for "Einheitsschulen." Its aims and the obstacles to its realisation.

How far "common schools" tend to obliterate class-distinctions.

The effect of differences of curriculum in rendering difficult the transference of boys from elementary to secondary schools.

Probable result of closer acquaintance between teachers in various grades and types of schools (pp. 230-245).

XVIII.—In education, the personality of the teacher more important than anything else (p. 245).

XIX.—Conclusion and summary (pp. 245-252).

Note.—The writer desires to acknowledge the help which he has received from several English and German friends who kindly read this paper in proof. He is specially indebted to Canon E. Lyttelton, Mr. R. L. Morant, Mr. F. Storr, Dr. R. P. Scott, Dr. Findlay, Dr. Gow, Mr. Fabian Ware, Mr. H. E. D. Hammond, Mr. Yoxall, M.P., Mr. A. E. Twentyman, Mr. C. C. Cotterill, and Mr. C. J. Addiscott.

PROBLEMS IN PRUSSIAN SECONDARY EDUCATION FOR BOYS

(With special reference to similar questions in England).

I.—Introduction.

"In its completeness and carefulness," wrote Mr. Matthew Arnold in 1866, "the school system of Germany is such as to excite the foreigner's admiration." The years which have passed since he uttered these words, linking with them a memorable tribute to the "faith and zeal" of the German people in maintaining at any cost the standards of higher teaching, cover a period of deep-reaching change in German secondary schools. Their variety has been increased, their numbers greatly enlarged, their curriculum again and again adjusted to what have been judged to be the changing needs of the time. We in England sometimes grumble at the number and intricacy of the suggestions which are constantly being made for the improvement or extension of one or other branch of our educational system. But the criticisms in this country are casual and intermittent as compared with those which perpetually engage the attention of the educated classes of Germany. What is here a stream is there a flood. The problems of determining the specific aim of each type of school and of securing the highest quality in its education, (questions which with us have for the most part been treated as subordinate to matters of organisation*) are in Germany scanned and sifted

*Cp. Mr. John Stuart Mill's speech in the discussion on the Elementary Education Bill at the Social Science meeting, April 4th, 1870:—"Mr. Chadwick had done a great service in bringing before the Association the most important part of the whole education question, the *quality* of the education. Many persons must have remarked, and perhaps blamed too severely, the little attention paid to the question of quality, in the discussion going on in and out of Parliament on Mr. Forster's Bill." The same point was raised in 1883, in regard to the higher grade of education, by Mr. Thring, of Uppingham, in the first and last chapters of his *Theory and Practice of Teaching*. And Sir Alfred Milner, speaking on May 2nd, 1896, remarked, with reference to the educational questions then being discussed, that "the chief thing which struck him was the scarcity of criticism from the purely educational standpoint. The economic, financial and religious aspects were discussed *ad libitum*, but no one seemed much concerned as to the influence which the changes proposed were likely to have upon the future of education itself." (*Manchester Guardian*, May 4th, 1896.) There are, of course, historical causes for the necessary prominence which has always been given, in English discussions on educational matters, to questions of organisation and administrative machinery. To some extent, questions of curriculum have been involved in these questions of administration, and, therefore, have been rather implied in the controversy than actually absent from the minds of the controversialists. But, even if this is admitted, the fact that the more strictly educational issues have been rather latent than expressed, has prevented the full force of public sentiment, or of expert knowledge, from being focussed on questions of curriculum and methods of teaching, with the result that many vital questions have received comparatively little attention, and that in England public opinion is much less informed as to the criteria of educational work than has for long been the case in Germany.

with that searching care which is the absolutely essential condition of scientific progress. Education as a whole, not this or that aspect of it, is regarded by the nation at large as a matter of fundamental public concern. To a degree almost incredible to us, parents in the humbler orders of German society are familiar with the aims, with the privileges, and even with the programmes of the various grades of schools. Travellers find that small shopkeepers, workmen in factories, waiters in hotels are alive, not merely in a general way to the advantages of education, but to the meaning and conditions of the different grades of schools which public authority provides. And, in this atmosphere of national sympathy with educational aims, men of the highest learning and position in all walks of life are incessantly working for the improvement of the schools, investigating their results, canvassing their curricula, defending or urging their claims. In short, education has the recognised position of a great branch of social science, and there is an audience for general and expert criticism alike. The advance of education in Germany is consequently to be compared to that of any of the other departments of science; it commands general respect by reason both of its intellectual significance and by the value of its practical applications. And a natural result is that the technical literature on German education is both in volume and in value without parallel elsewhere.

At this point, however, a few words of further explanation may be permitted in order to guard against possible misunderstanding. As a matter of historical fact, Germany has derived through her higher schools and universities much of the stimulus which has determined the direction of the influence exerted by her on European culture. But it would obviously be an error to infer from this that a highly developed system of schools is the only organ through which streams of intellectual and moral influence can pass into the national life. The history of England during the same period shows how many other channels are open, in a more loosely ordered community, for the transmission of the forces which direct national effort, affect its range, colour its moral sympathies, and inspire its faith. In England the school has played a less important part than in Germany. Other opportunities and institutions—religious, political, administrative, commercial, colonizing, and industrial—have furnished Englishmen with the means of education and discipline which the German has found chiefly, though by no means exclusively, in the school and university. It is specially hard, therefore, for us to realise what in our national life has been the moral and intellectual equivalent of the German system of higher education. That, roughly speaking, there has been some such equivalent is clear from the results. But the two systems have necessarily produced different kinds of results, each with their characteristic strength and weakness. Nor is this a merely academic question. Comparatively recent changes in the conditions of life have tended to make the more precise and highly differentiated results of systematic school and academic training apparently more valuable, and certainly more indispensable,

elements in national welfare. The vigorous but usually imperfect results of self-education are finding themselves overmatched by the competition of highly specialised aptitudes skilfully combined with one another, subordinated into a single whole and applied with the utmost economy in the expenditure of effort and material. It is really, in another form, the struggle between robust individualism and the collective effort of a disciplined multitude. The educational system of England (using the word as embracing the plexus of influences which with us are at work in imparting skill and building up character) tends in the main to produce the first; the German system tends to produce the second. In the end, the merits of the two systems must be tested by broad results. Isolated parts of the two systems are not, as a rule, interchangeable. What *is* possible is to compare, at given points and stages, the quality of the product of each system. This can be done more easily in the field of education than at later stages in life when the causes and effects are more intermixed. But even here two qualifications seem to be necessary. In the first place, if a balance is struck between the *intellectual* attainments of the youth of two nations at the close of the normal periods of school life, that country which has the most highly developed educational system will probably come off much better in the inquiry than if comparison were made between the same groups of boys at a somewhat later stage. The crucial test is "the great and searching examination of actual life." Those who profit most by the freedom of the more individualising system often retain a greater keenness and freshness of mind, and therefore avail themselves more fully of later opportunities of self-improvement. In the second place, it is necessary to determine which effect on the whole is the better—the securing of a high level of average quality with some depression of the stronger individualities, or a great diversity of attainment and aptitude ranging from the very highest excellence to extreme dulness and ignorance. Here the German system seems to tend on the whole to produce the first result; the English system the second. But it is in the nature of the case that the English system of schools cannot present the particular kinds of excellence of organisation which will be expected in the German. National energy and thought have been poured, for a much longer time and with much greater intensity of effort, into their educational system than into ours.

Through the labour of generations, the public higher schools for boys in Germany stand, from certain points of view and in many important respects, as models to the world. They are unrivalled in their high level of many-sided attainment. Thought has been lavished on the planning and concentration of their studies. The quality, the range, and the method of their teaching are under the watchful care of State inspectors, themselves experienced in the work of secondary education. All the schools are thus scrupulously kept up to an exacting standard of excellence. The teachers, almost all of them University men, are required to have passed through a special

course of professional training in the art of teaching.* On appointment to a post in the public schools, the teachers become civil servants, and are entitled to stipends, to which are attached regular increments proportionable to their length of service, as well as pension rights, and claims to compassionate allowances for their widows and children.† Thus staffed and supervised, the higher schools, in each State of the Empire, form a system complete as a whole but carefully articulated in all its parts.‡ The different types of schools are not allowed to become confused or intermixed. There is no mechanical uniformity, but, to a degree unknown in England, "all the whole Realm has but one use." The curriculum is either fully classical (*i.e.*, with Latin and Greek), semi-classical (*i.e.*, with Latin only), or non-classical as the case may be, but the name of the school at once reveals its type, and no ambiguity of title is permitted to mislead the unwary. A school cannot cozen the public by a high-sounding name or a pretentious advertisement. The nomenclature of the schools is in each State as fixed as that of the coinage, and the Government does not suffer the currency to be debased. It is strongly held by most German authorities that a single school cannot be a great many kinds of school at the same time. The plan of each has been carefully thought out and adjusted to a specific end. To fulfil its duty, with constantly increasing precision of aim, the school (it is urged) must be at one with itself. It must not be broken up into a variety of departments, but rather knit together into a single whole, inspired by one aim, and concentrated on one purpose.§ *Ignoranti portum nullus ventus suus est.*

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* For the regulations as to the training of teachers for higher schools, now in force in the various states of Germany, see Prof. Rein's *Encyklopädisches Handbuch der Pädagogik*, s.v. Gymnasiallehrer, the *Statistisches Jahrbuch der höheren Schulen*, 1897-8 (Leipzig; Teubner); and Dr. Findlay's article on "The Registration and Training of Teachers in Secondary Schools in the States of the German Empire," in the Report of the Royal Commission on Secondary Education, 1895, vol. v., pp. 112, *seq.*

† The salaries, etc., paid to the teachers in higher schools in the different States of Germany are set out in Prof. Rein's *Encyklopädisches Handbuch der Pädagogik*, s.v. Besoldung. The scale of fixed professional incomes is lower in Germany than in England, but it will be observed that the salaries of teachers in the German higher schools, though much smaller than those received by the corresponding ranks of teachers in some of the wealthier English secondary schools, are higher than those paid to English teachers less fortunately placed. The great differences in the scales of salaries which are found in English secondary education have no parallel in Germany. There are fewer "prizes" than with us, but (national differences being taken into account) a higher average of remuneration. For the differences in the established position of assistant-masters in German and English secondary schools, see Mr. Hammond's paper, in this volume, on the Higher Schools of the Grand Duchy of Baden.

‡ Though there are substantial differences in the organisation of the higher school systems of the various States in the German Empire, yet (speaking broadly) they all present the same general qualities, and (except in details) may therefore be contrasted as a whole with the English system.

§ How far modifications of this distinct classification are now being permitted or encouraged is discussed at a later point in this paper.

II.—Sketch of the History of the Reorganisation of Secondary Education in Prussia, 1808–1818.

The framework of the fabric of public education must necessarily be a sound system of organisation, in which the interests of the State, the varying claims of localities and the counsels of persons closely acquainted with the actual working of schools are co-ordered and combined. Prussia gained such a system in the years 1808-1818. The Battle of Jena in 1806 had prostrated her before Napoleon. The building up of national education on a new and enduring basis was part of that supreme effort of Prussian statesmanship, which in the hour of disaster regenerated the State. "Large and creative ideas, sure insight into what was practicable, wisdom and vigour of purpose have never worked together in such admirable harmony as in Prussia between Jena and Waterloo."* There was thus a remarkable conjuncture of intellectual accord, moral fervour and political opportunity when, under the leadership of Freiherr vom Stein, a group of statesmen set themselves to re-create the fortunes of their country. Universal compulsory military service and the revision of public education were the two most essential features of the internal policy of the State.† It aimed at raising up a more vigorous and self-reliant type of citizenship by stimulating the intellectual activity and independence of individuals, by arousing their moral and religious feelings, by familiarising them with a more ideal conception of life, and by lessening the bias towards self-indulgence. To do this it imposed discipline —in the form of compulsory service with the colours, but also and primarily through the agency of the schools. "Most is to be looked for," wrote the author of Stein's so-called Political Testament in 1808, "from the education and instruction of youth. Could we by a method grounded on the internal nature of man develope from within every spiritual gift, rouse and nourish every noble principle of life, carefully avoiding one-sided culture; could we diligently nurse those instincts hitherto so often with shallow indifference disregarded, on which rest the force and dignity of man—love to God, king and fatherland—then might we hope to see a generation grow up vigorous, both in body and soul, and a better prospect for the future unfold itself." There followed, therefore, a broadly conceived policy in public education; and what Prussian elementary education owed to the ideas of Pestalozzi and to the inspiration of Fichte, Prussian higher education found in the guidance of Wilhelm von Humboldt, Süvern, Wolf, and Schleiermacher.

So far as the Prussian Higher Schools were concerned, the methods of reorganisation have been summarised by Professor Paulsen, in his brilliant history of higher education in Germany, under four main heads, viz., the further development

* Paulsen. Geschichte der Gelehrten Unterrichts, vol. 2, 277 and 278-9.

† For the details of Scharnhorst's military reforms, which have indirectly had immense influence on Prussian education, see Seeley's Life of Stein, vol. ii., pp. 96, *seq.* For Stein's Political Testament, see the same work, vol. ii., pp. 289-93.

of Governmental control; the creation of a recognised profession of teachers in higher schools; the fixing of the normal period of study for those schools, with their separation from the category of smaller German schools; and finally the laying down of a definite course of instruction, or Lehrplan. The policy of 1808-1818 was, however, far from being the commencement of State control over higher education in Prussia. But it drew the cords tighter, and made the control more effective and searching than before. The Prussian State had always enjoyed large rights of patronage in certain higher schools. In 1722 the Crown had created a department (Geistliches Departement) for the exercise of Crown rights of control over schools and churches. In 1787 Governmental influence had been made stronger by the institution of a special department (Oberschulkollegium), by means of which the permanent influence of educational experts was secured for the supervision of educational matters. It is significant that one of the first acts of the Oberschulkollegium was to require from the Consistories, which served as provincial authorities, detailed information as to the material equipment and internal organisation of the schools in every town. In 1794 was promulgated the Allgemeine Landrecht, which formally declared schools and universities to be State institutions, and their establishment as permissible only with the State's previous knowledge and approval. All public schools and educational establishments were to be under the supervision of the State, and subject at all times to its examinations and inspection. No one was to be refused admission to a public school by reason of nonconformity in religious belief. And the teachers in all higher schools were to be regarded as officials of the State. At the same time, in another part of the same document it was ordained that the direction of the manner in which a child should be educated belonged in an eminent degree to his father.*

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* See Wiese-Kübler *Sammlung der Verordnungen und Gesetze für die höheren Schulen in Preussen* (ed. 1886), vol. 1, pp. 1 and 2.

Allgemeine Landrecht. T. II., Tit. 12.

§ 1. Schulen und Universitäten sind Veranstaltungen des Staates, welche den Unterricht der Jugend in nützlichen Kenntnissen und Wissenschaften zur Absicht haben.

§ 2. Dergleichen Anstalten sollen nur mit Vorwissen und Genehmigung des Staats errichtet werden.

§ 9. Alle öffentlichen Schul-und Erziehungsanstalten stehen unter der Aufsicht des Staats und müssen sich den Prüfungen und Visitationen desselben zu allen Zeiten unterwerfen.

§ 10. Niemandem soll wegen Verschiedenheit des Glaubensbekenntnisses der Zutritt in öffentliche Schulen versagt werden.

§ 65. Die Lehrer bei den Gymnasien und anderen höheren Schulen werden als Beamte des Staats angesehen.

Cp. also M. Arnold. Report of Schools Inquiry Commission, vol. vi., pp. 555 *seq.*, and Paulsen op. cit. vol. ii., pp. 90 *seq.* and 282.

Dr. Paul Cauer, in his essay on *Staat und Erziehung, Schulpolitische Bedenken*, (Kiel and Leipzig, Lipsius and Tischer, 1890), draws attention to the significant fact that, in the Allgemeine Landrecht, Tit. 2 §74 runs as follows:—Die Anordnung der Art, wie das Kind erzogen werden soll, kommt hauptsächlich dem Vater zu."

In the same work (pp. 10, seq.), Dr. Cauer points out that the clause which declared that all teachers in Gymnasien and other higher schools should have the status of Civil servants, remained in part a dead letter, because it did not

But in 1808, in place of the Oberschulkollegium which stood directly under the Crown, there was established in the general reorganisation of the Government Departments, a section of the Home Office "for worship and public instruction." Of this section, Wilhelm von Humboldt was the first head. "In Prussian history," said Professor Seeley, "the year between April, 1809 and April, 1810, belongs to W. von Humboldt almost in the same way that the period between October, 1807, and November, 1808 belongs to Stein." The aim of the Government was to bring the highest and most cultivated intellects of the time to bear directly on the problems and management of secondary and higher education. There was therefore established as part of the educational section of the Home Office, an Educational Council ("Wissenschaftliche Deputation"), the task of which was defined by von Humboldt as comprising the examination of new methods of teaching and systems of training, the devising of new courses of study, the inspection of text books for use in schools, and the scientific examination of all candidates for the office of teacher. The members of the Educational Council were required to be eminent in philosophical, mathematical, philological, and historical studies. Representatives of purely professional studies were excluded, as the special care of the Council was to prevent prema-

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confer a definite rank on these teachers. The latter consequently remained for some time in a position of their own, outside the hierarchy of the regular Civil Service. Gradually the State strengthened its hold on the educational system, began to level down irregularities in curricula, and obtained a determinative influence over the appointment of headmaster and teachers in public schools. There were difficulties in discipline in the large towns, school attendance was often broken, the somewhat doubtful status of the teachers impaired their authority with parents and the public. All these facts facilitated the growth of State interference, which, whilst involving control, also conferred undeniable advantages. For example, the salaries of teachers in the various types of secondary schools in Prussia were raised through the operations of the Normal-Etat of 1872, and the compassionate allowances (Gnadenquartal; Gnadengehalt) for widows, instituted and confirmed by the decrees of 1816, 1842, 1859, and 1860, were much increased and developed by the ordinances of 1882 and 1888. (Cp. Wiese-Kübler *Verordnungen und Gesetze für die höheren Schulen in Preussen*, vol. ii., pp. 284 *seq.*, 395 *seq.*

In England we are still at an early stage in the transition. Thus it is stated in the Report of the Royal Commission on Secondary Education (1895), vol. 1, p. 190: "The fact is that the body of teachers must necessarily occupy a somewhat anomalous position in the economy of national life. The service which they render is one over which the State must, in self defence, retain effective oversight; the provision of teaching and the conduct of education cannot be left to private enterprise alone. Nor, on the other hand, do the teachers stand in the same relation to Government as does the Civil Service. Education is a thing too intimately concerned with individual preference and private life for it to be desirable to throw the whole of it under Government control. It needs organisation, but it would be destroyed by uniformity; it is stimulated by inspection, but it could be crushed by a code. In the public service, where the chief object is administrative efficiency, the individual officer is necessarily subordinate; in education, where a chief object is the discovery of more perfect methods of teaching, the individual teacher must be left comparatively free. Every good teacher is a discoverer, and, in order to make discoveries, he must have liberty of experiment." The bearing of proposals to make English elementary school teachers Civil Servants is discussed in a special report on "The Civil Service Idea," printed in the Annual Report of the National Union of Teachers for 1897, pp. lxxxvi.-cix.

ture specialisation for practical or professional ends.* First Wolf and then Schleiermacher were appointed directors of the Educational Council; Süvern and Nicolovius were members of it. This in Mr. Matthew Arnold's words, shows "the sort of persons who in Prussia were chosen for the management, at a critical moment, of the State's relation with education." In 1817 the Education Department was separated from the Home Office and given an independent existence of its own. The chief part of its preliminary work of inquiry and recommendation having now been accomplished, the Educational Council was entrusted with the more limited, but essentially important, duty of superintending the examination and registration of intending teachers. Finally in 1825 the provincial educational authorities were reorganised. Hitherto questions which, in the course of the duty of the Educational Department, called for consideration or report at the hands of provincial authorities, had been remitted to the Consistories, ecclesiastical bodies nominated by the Crown. Each Consistory was now divided into two parts, the one to deal with ecclesiastical, the other with educational questions. To the latter body was given the title of Provinzialschulkollegium. Thus was completed in its main outlines the administrative organisation which still exercises supervision over the higher schools of Prussia. The Oberpräsident of the Provincial Government is chairman of the Schulkollegium of the province. The Provinzialschulräte supervise the schools of the district on behalf of the Government. They approve the appointment of teachers, and are regularly in charge of the arrangements of the leaving examinations.† Furthermore, as the State alone confers on the schools the privileges which determine their status and, in large measure, their *clientèle*, it will be seen that the Central Government has practically entire control over the whole of the higher education of the country.‡ Thus in Prussia the machinery for the organisation of secondary education has been at work for more than seventy years. In England it is still, both locally and centrally, incomplete.

There were also reforms of more or less consequence in secondary education in the States of South and Central Germany during the earlier part of the century.§ In the history of English secondary education, there are traces, during the same term of years, of the growing force of a similar movement under the leadership of Brougham. Indirectly it had considerable influence, but it was long before it resulted in any form of direct interference by the State.

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*Paulsen, vol. ii., p. 282.

† Paulsen, vol. ii., p. 283.

‡ Cp. Special Reports on Educational Subjects, 1896-7, pp. 384-6 and 438.

§ Paulsen ii., pp. 403-417 (Saxony); 417-431 (Bavaria); 431 (Württemberg); 437 (Baden).

III.—Contrast between the German and the English Attitude towards State Control in Higher Education.

It was in Prussia that the characteristic tendencies of the modern German movement for the organisation of secondary education first clearly showed themselves, and where they most rapidly resulted in important changes. The questions of administrative machinery were quickly settled, and the way was open for the more detailed consideration of the nature and quality of the education itself.

It may be remarked, however, that the decision in favour of so large a measure of State control, though apparently taken with little hesitation, was none the less momentous in its influence on German life. The relation of the State to higher education in all its grades raises issues of profound importance from the point of view of intellectual freedom. It has been argued with much force that any systematic interference by the State with the methods and subject-matter of education, and more especially with those of higher education, cannot but tend to imperil perfect liberty of thought. The matter lies in what has been called the "debatable territory between Individualism and Socialism," and would probably be determined by most persons on arguments less of abstract principle than of practical expediency. But many will feel, nevertheless, that there are grave reasons for distrusting the *ultimate* results of a complete and stringent control of higher education by the State, however admirable and salutary the rapid improvement which such control may at first effect. For it is the almost inevitable tendency of State systems to resent the growth and dissemination of ideas and theories which seem to threaten the foundations of the existing order. Surprise may be felt at the comparative ease with which changes of such profound significance were introduced into Prussia as contrasted with the successful resistance which was offered in this country to any proposals with a similar tendency.* But it will be remembered that, apart from the differences in the position of the two countries at the time, England was the more deeply divided by differences of political and religious opinion. She was also at that time under the dominant influence of the ideas embodied in the *Wealth of Nations*. And Adam Smith had shown a scarcely veiled hostility towards the provision of higher education by the State, though he was in favour of public elementary education in order "to prevent the almost entire corruption and degeneracy of the great body of the people"—consequences which he thought likely to result from the progress of the division of labour, unless the Government took some pains to prevent them.† It was in harmony with these ideas that

* For an analysis of the reasons why Government has always assumed a larger province in Prussia than in England, see Seeley's *Life and Times of Stein*, vol. i., pp. 168, *seq.* (Cambridge, 1878).

† *Wealth of Nations*, Bk. v., chapter 1: "Those parts of education, for the teaching of which there are no public institutions, are generally the best taught. . . Were there no public institutions for education, no system, no science

nothing was done in England, in the earlier years of the present century, to reform and extend secondary education by the action of the State. A powerful and vigorous element in the nation had been brought up in traditional hostility towards any measures which might enable the Government to impose uniformity of faith and teaching. The lessons of 1662 and 1665 had not been forgotten. And thus those who were naturally the keenest advocates of higher education were at the same time the least anxious that it should be brought in any way under State control.

It was indeed singular that Wilhelm von Humboldt should have been the man to bring into effective working in Prussia a plan of educational administration which involved so large a measure of State interference. He, who had been the apostle of individual liberty, found himself called to the task of laying the foundations of an elaborate system of State control in one of the two departments of national life which are the most sensitive to any limitations of their freedom.* In 1792, seventeen years before he was appointed Director of Public Education, he had written (though he had abstained from publishing), a work on the sphere and duties of Government, in which he laid down the principles that "reason can desire for a man no other situation than one in which each individual enjoys the most untrammelled freedom to develop the characteristics of his own personality," and that "education lies quite outside the limits within which Government should confine its operations." He had actually

would be taught for which there was not some demand, or which the circumstances of the times did not render it either necessary or convenient, or, at least, fashionable to learn. A private teacher could never find his account in teaching either an exploded and antiquated system of a science acknowledged to be useful, or a science universally believed to be a mere useless and pedantic heap of sophistry and nonsense. . . There are no public institutions for the education of women, and there is accordingly nothing useless, absurd, or fantastical in the common course of their education. . . If the authority, to which the teacher is subject, resides in some other extraneous persons . . in the governor of the province, or perhaps in some minister of state, it is not indeed, in this case, very likely that he will be suffered to neglect his duty altogether. . . An extraneous jurisdiction of this kind (however), is liable to be exercised both ignorantly and capriciously. In its nature it is arbitrary and discretionary, and the persons who exercise it . . . are seldom capable of exercising it with judgment. From the insolence of office, too, they are frequently indifferent how they exercise it, and are very apt to censure or deprive him of his office wantonly and without any just cause."

* This contrast is well brought out by Cauer (*Staat and Erziehung*, pp. 60 *seq.*). (Cp. also Seeley's *Life of Stein*, vol. ii., pp. 424, *seq.*). To an English reader, it is interesting to notice further that John Stuart Mill prefixed a quotation from Wilhelm von Humboldt's work on the *Sphere and Duties of Government* to his own *Essay on Liberty* (published in 1859), in the course of which he lays stress on von Humboldt's doctrine of the freedom necessary to individual development. Mill's own application of the doctrine of liberty to the problem of public education (*Liberty*, p. 190, seq.), was as follows: "That the whole or any large part of the education of the people should be in State hands, I go as far as anyone in deprecating. All that has been said of the importance of individuality of character, and diversity in opinions and modes of conduct, involves, as of the same unspeakable importance, diversity of education. A general State education is a mere contrivance for moulding people to be exactly like one another; and as the mould in which it casts them is that which pleases the predominant power in the Government, whether this be a monarch, a priesthood, an aristocracy, or the majority of the existing generation, in proportion as

taken for the motto of that work the words "*contre la fureur de gouverneur, la plus funeste maladie des gouvernements modernes.*" But in the interval which elapsed between 1792 and 1809 much had happened, and we can measure the urgency of the national need for improved education in the later year by the change which had taken place in von Humboldt's standpoint. The reform of education had become an essential matter, necessary to the revival of national well being, and the Government could not safely shrink from using all its powers to secure the requisite change. It would have been pedantry to refuse to apply the instrument which alone could do the work surely enough and quickly enough. That von Humboldt was alive to the dangers of the change is clear from his insisting that "headmasters should be left as free a hand as possible in all matters of teaching and discipline." But he was carried forward by the urgency of national need. Good teachers were indispensable, and good teachers, he thought, could not be secured unless the Government limited the rights of private and municipal appointment in the case of vacancies. He insisted that in future no one ought to be allowed to undertake higher education even in private schools who did not hold a certificate of competency awarded by the authority set up by the State. And thus he was the chief agent in starting a system which, even in his own lifetime, incurred the charge of tending to limit unduly the liberty of teachers and of students.

IV.—The further Development of State Control of Secondary Education in Prussia.

But in these matters every age and nation has "son belvédère différent." It is, however, to the period of reconstruction during the ten years following the Treaty of Tilsit in 1807 that the course of the later development of Prussian Secondary Education

it is efficient and successful, it establishes a despotism over the mind, leading by natural tendency to one over the body. An education, established and controlled by the State, should only exist, if it exist at all, as one among many competing experiments, carried on for the purpose of example and stimulus, to keep the others up to a certain standard of excellence. Mill, indeed, goes on to allow that there are conceivable conditions of social order in which, "as the less of two great evils" Government may rightly take upon itself the business of schools and universities, and it had, doubtless, been due to von Humboldt's sense of national peril, and of the urgent need for educational organisation that the latter set himself in 1809 to the task of increasing State interference in the sphere of secondary education. It is none the less remarkable, however, that the early writings of the man who subsequently did more than anyone else to enlarge the scope of State control in Prussian higher education, should have been one of the causes which moved so powerful an advocate of liberty in another country to cite and enforce the doctrines on behalf of freedom in education, at a time when the administrative machinery, which von Humboldt himself had set in motion, had already taken a form very unlike anything that Mill could himself have been expected to approve.

can be traced. The ideas dominant in those years gave the ply to the whole system of higher schools.* And this is the chief historical cause of the fundamental difference between the Prussian system and our own. The Edict of 1810 fixed the qualifications of the teachers in all higher schools. Before that year the examinations of candidates for appointment as secondary teachers were conducted locally with special reference to the particular vacancy, and doubtless varied in standard in different places Or the patron of the school would accept a testimonial from the Professor under whom the candidate had studied at the University.† The new regulations introduced a Governmental test (examen pro facultate docendi) and thus indefinitely curtailed the rights of private patronage. Again, an Edict of 1788 had established a leaving examination for the Prussian Gymnasien, but by his "Memorandum of Instructions" in 1812, W. von Humboldt extended the scope of the leaving examination to all secondary schools without exception, and excluded those who failed to obtain the certificate from sharing in bursaries provided out of public funds. This change immediately reacted on the standard of school work, though subsequent entrance to the University by a matriculation test was not yet wholly closed to those who failed to pass the school-leaving examination. In the same year (1812) Süvern drew up the Lehrplan, or curriculum and course of study for the classical schools.‡ The uniform tendency of these changes was to increase the control of the State

* This point is clearly brought out in an interesting address delivered by Dr. Karl Reinhardt, the eminent Director of the chief Classical School at Frankfort-on-the-Main, on May 22, 1892 ("Die Umgestaltung des höheren Schulwesens," Vortrag im Freien Deutschen Hochstift, Frankfurt-am-Main, M. Diesterweg, 1892). "The Gymnasium which we, and even the oldest men among us, know, is a thoroughly modern creation. It arose in the period of the reorganisation of the Prussian State, at the time of the war of Liberation, and was completed in the following decades. Just as at that time the ideal of self-government was called into being by Stein, just as the army was reconstructed by Scharnhorst, so did Wilhelm von Humboldt become the creator of the new classical school. Fresh life roused the Prussian State from the torpor which had seemed to possess it, and moved von Humboldt to secure means of entrance for the new ideas which then filled the world. The new Prussian Gymnasium arose out of the happy combination of the organising power which resided in the Government, and of the thoughts and emotions which had proceeded from the great literary movement in the nation. These two tendencies were united in the person of Wilhelm von Humboldt. The trusted friend of Goethe and Schiller, the enthusiastic champion of Greek ideas, he was also a statesman and minister, and was called to exert decisive influence on our educational system."

Dr. Paul Cauer (*Staat und Erziehung*, p. 61) takes the same view. "Wilhelm von Humboldt was not much more than a year the Director of the Education Department of the Home Office; but during that short time he set in motion the tendencies which proved most fruitful in results. Everything that was most important in the arrangements which were established in the following year by Süvern, Schulze, and von Altenstein, can be traced back to W. von Humboldt as their real originator."

† Paulsen ii., p. 284.

‡ Paulsen ii., pp 286, 289, seq.

over the whole of secondary education. Later changes (*e.g.*, Schulze's new regulations for the leaving-examination, made in 1834, the Lehrplan of 1837, the *Unterrichts- und Prüfungsordnung für die Real- und höheren Bürgerschulen of* 1859, the Lehrpläne of 1882 and those of 1891*), important as they have all severally been, are developments and extensions of the same principle. Each in turn has made the grip of the State firmer than before.

In the whole history of educational organisation there is nothing more remakable than the steady advance of State control and of the standard of requirement, exhibited by these successive changes in the regulations for Prussian secondary schools. The long period, as it passes under review, is seen to have been occupied with almost incessant debates on matters of curriculum and methods of teaching. There have been action and reaction, project and criticism, changes and counterchanges in the balance of studies, but, in all and through all, the permanent result has been to raise the standard of attainment and to strengthen the control of the State. Nothing has been done at haphazard or in deference to mere clamour. Strict economy has been practised in the adjustment of means to ends. Waste of money and effort has been consistently discouraged. There are signs, at every stage, of the influence of concentrated knowledge. Experience and professional skill have left their mark on the whole. In its earlier stages, the system was clearly impressed by the personality of its founders, but gradually the work and influence of individual men grow harder to trace, until at length the whole organisation seems to move forward by some inner force of its own, absorbing into itself the life work of the individual teachers and administrators, and developing irresistibly along the lines determined by its own past history and success. The requirements of military service and the methodical organisation of the higher schools cannot but have profoundly affected the conditions of national life.

Note on the History of the Leaving Examination in Prussian Secondary Schools.

The history of the development of the Leaving Examination (Abiturientenexamen) in Prussian secondary schools, illustrates the tendency of State control in matters of higher education to extend its range and to increase the stringency of its requirements. The details are given by Dr. Paul Cauer, in his *Staat und Erziehung*, pp. 22 *seq.* The leaving examination was instituted in Prussian Gymnasien by the Royal Edict of December 23rd, 1788. This Edict stated that many youths hurried to the University without being properly grounded in their studies, and while, therefore, intellectually immature; that the consequences of this state of things were hurtful, not only to the youths themselves, who found it difficult or even impossible to make proper use of university training, and were, therefore, tempted to fall into idle and irregular habits during their academic course, but also prejudicial to the public interest, because many public offices requiring solid attainments were filled by men

* For an account of these successive changes, see Paulsen ii., pp. 345, 348, seq., 511, seq., 553, seq., 576, seq., 595, seq., and the Lehrpläne und Lehraufgaben die höheren Schulen, a translation of which, by Mr. W. G. Lipscomb, is published in this volume.

who, if not actually ignorant, were shallow and imperfectly prepared for their work. In order to remedy these evils, it was thought necessary to do something to check the premature entrance of ill-prepared students to the University, and to stimulate boys to make conscientious use of school instruction. The customary entrance examinations, held at the University itself, were found to be lacking in the necessary stringency and thoroughness, in consequence of the great number of the candidates. They failed alike to stimulate industrious scholars, and to deter those who were ignorant and idle. Therefore, it was ordained that in future those youths who proposed to go on to the University should be required, before leaving school, to be publicly examined there under fixed regulations. According to the result of this examination, they should receive certificates stating whether they had been found ripe or unripe for academic studies, as the case might be. Each student would be required to produce the certificate at his matriculation into the University. The certificate would be preserved by the University authorities during the student's academic course, and finally returned to him at its close, with a further endorsement as to the character of his University studies. But the Edict was careful to add that it was not the Royal intention so far to curtail civic liberty as to interfere with the right of fathers or guardians to send youths, if they so pleased, to the University even while still intellectually unprepared for the academic course. The decision in such a case was to be left as before to the judgment of the parent or responsible guardian himself. But nevertheless, the school certificate was to state distinctly whether the lad was ripe or not, and the Government expressed its confidence that many parents and guardians, at all events, would be guided by this statement of opinion, and would keep back their sons or wards until the latter had succeeded at a second trial in gaining a certificate of maturity for University studies. In other words, the leaving examination was designed as a stimulus, while stopping short of actual compulsion. The new regulations on the subject, which were issued in 1812, extended the leaving examination to all the higher secondary schools in Prussia without exception, but did not actually close the doors of the University to those who should fail to obtain in it the certificate of "ripeness." All that was stipulated for was that the certificate should bear on the face of it a clear testimony as to the holder's fitness or unfitness for University studies. The Educational Council (Wissenschaftliche Deputation) at Breslau raised a question as to the advisability of leaving the matter so free. The reply of the Education Department was definite enough, and indicates the prevailing principle of the time. "To refuse admission to the University to those who fail to get the certificate of ripeness would involve too serious an encroachment by the State on parental authority." Moreover, it was pointed out by the Department that a youth who is plunged into the new conditions of University life may be stimulated thereby to shake off previous indolence, and to recover lost ground. And, finally, the Department stated it as being its aim to make the gaining of the leaving certificate rather a natural outcome of the healthy tone and emulation of the school than a matter of compulsion. But a great change in these conditions was brought about by the gradual rise in the requirements of various professions. One by one, the authorities began to decide that University students, who had failed to gain at school the leaving certificate of ripeness, should not be admitted to the State examinations prescribed for admission to the various professional careers. This change was introduced in the case of students of Catholic Theology in 1820, of law students in 1831, and of students of Evangelical Theology in 1833. These harder conditions were defined in the regulations for the leaving examinations published in 1834. The latter laid down the rule that only those who had obtained a satisfactory leaving certificate at school should be admitted (1) to the study of theology, law (including economic science), medicine (including surgery), and philology, at the University; (2) to the examinations for academic honours; and (3) to the subsequent examinations for appointment to those public offices in Church or State for which a course of three or four years' study at a University was prescribed. Thus, in the comparatively short space of twenty-two years, there had gradually been accomplished a complete departure from the principles of individual freedom so carefully enunciated in 1812. The tendency of the time had proved irresistible, and the State had been compelled, almost against its will, to convert a test, originally designed for stimulus, into the normal qualification for youths preparing themselves for professional life. Further limitations were afterwards set on the number of attempts which a youth was allowed to make to obtain a certificate of ripeness in successive examinations. Thus, by slow degrees, the school leaving examination was made the sole gate of entrance to the studies required in preparation for all branches of professional life. State control gradually became complete. It is the State which conducts the examina-

tions for admission to the different professions; the State determines the range of studies in the secondary schools; the State fixes the standard required in the school leaving-examinations. It alone bestows on the schools the privilege of qualifying its scholars for the courses of study prescribed for the various professional careers. Thus it has slowly advanced from stimulus to monopoly, by a development which, though logical enough, was apparently neither desired or foreseen by the men who started it. But its methods in conducting the leaving-examination allow considerable freedom to the teachers, and closely follow the course of work done in the school.

[For the present regulations as to the Leaving Examination in Prussian Secondary Schools, see Wiese-Kübler, *Verordnungen und Gesetze für die höheren Schulen in Preussen*, vol. ii., pp. 450, seq., and *Statistisches Jahrbuch der höheren Schulen*, 1897-8, ii. Abteilung, pp. 1036, seq. For an account of the method of conducting the leaving-examination, see a memorandum by the present writer in vol. v. of the Report of the Secondary Education Commission, pp. 27, seq.]

V.—German Opinion as to the Range of Influence of Secondary Schools.

It is admitted, however, on all hands in Prussia that the present is a time of transition in the methods and regulations of the higher schools. Secondary education has there, as elsewhere, to adjust itself to changes in the conditions of modern life, to the new social needs, and, above all, to the movements in thought and opinion which underlie national institutions and inevitably affect their spirit and form. All over the civilised world the same movement can be traced, but in no country are the issues at stake so clearly marked as in Germany, where the highly organised system of schools becomes a focus for criticism. In England, the new ideas take root in individual schools. The changes are sporadic and their significance often unnoticed. From time to time they become numerous enough to attract attention, but they are often made at haphazard and without any thorough sifting of the arguments for and against. In Germany, on the other hand, the precise organisation of the schools compels a clearer statement and more searching investigation of the reasons for change. And thus the aim of the schools is more definitely thought out, criticism becomes at once more general and exact, public interest is more widely roused, and the new tendencies are often more clearly defined in discussions about secondary and higher education than in other spheres of debate.

The national importance of higher education is indeed so universally recognised in Germany, and the influence of the schools on the future of the country so generally perceived, that some observers deprecate the exaggerations to which this state of mind is prone.

"No department of our national life," wrote Dr. Reinhardt in 1892, "has attracted so much attention and interest during recent months and years as our educational system. What have people not made the schools answerable for, and what have they not hoped or feared from the educational changes which have been planned or carried into effect? Some people regard the whole spiritual tendency of the nation as dependent on the organisation of the school. Grave evils which show themselves in the life of the people are traced back in large measure to what the school has done or failed to do. Many persons, indeed, confidently rely on the reforms, which they recommend, bringing back a sort of golden age. Others, not less prepossessed, believe that by perpetuating a given form of school it is possible to arrest at a given stage the spiritual growth of a nation. We hear lamentations and predictions based on the assumption that the moral tendency of our education would be altered, and that our whole system of education would be imperilled,

by a change in the number of school hours devoted to given subjects and by a departure from the traditional distribution of school time among the various branches of the curriculum. Such opinions imply a grave and injurious exaggeration, which must be challenged in the interest of the school itself. Excessive expectations involve excessive demands, and an institution which fails to answer to the expectations which are entertained of it, falls into a false and unfavourable position. The school can indeed accomplish much that is good by training its pupils in honour, obedience, courage, and true humility of mind. But it can also do much harm. The value of the school lies much more in the character of the teachers and in the methods of their teaching than in the actual information which it imparts. It depends chiefly on the personality of the teacher whether the pupil applies himself with real liking to the subject-matter of instruction, and thereby developes his powers, or whether he shrinks back from it with distaste and turns away from it with loathing. He alone who himself loves his work and calling can awaken such love in another person. The man whose heart is cold spreads chilly indifference around him. Even religion, that tenderest and finest subject of instruction, can be so handled by an unskilful teacher as to become hurtful rather than profitable. On the other hand, in skilful hands, technical subjects, singing, gymnastics, and drawing can be made to exert a strong moral influence on the pupil. Not a little of the real effect of the school is attained by means of the community of interests which it fosters, by the tone which prevails in it, by the mutual influence on one another of the pupils whom it brings together. As for the curriculum, it does in any case more harm by requiring too much than by asking too little. By attempting too much it easily produces satiety; by attempting too little it may, in spite of its defects, excite a healthy appetite for more.

"Now, important as the school is, and powerful as it is to work for good or evil, it is nevertheless quite powerless by itself to evoke a spiritual movement in a nation or to arrest the further decline of such a movement when already in process of decay. A spiritual and intellectual movement which stirs the whole nation penetrates into the school through every pore. Lately we have often heard the phrase, 'He who commands the school, commands the future.' In this belief great parties in the State have made it their battle-cry to struggle for the control of the schools. But, if phrase there must be, it had better run, 'He who commands the future, commands the school as well.'"

That such a protest as this should have been thought necessary by one of the most eminent of living German teachers is in itself a proof how deeply ingrained in the national mind is a belief in the importance of the higher schools. It is not assumed that they will remain merely neutral or indifferent in face of the problems of the age. On the contrary, they may be set the task of counterworking what are regarded by the Government as the evil tendencies of the time. It is held that part of their business is to fix the moral aim of the scholars, and this, of course, implies a definite attitude towards many disputed questions.* The fact

* This point of view is taken in the "Instruction ministérielle," issued by the then French Minister of Public Instruction (M. Léon Bourgeois), in 1890, and again in an address given by him on July 30th, 1891, "Avoir un idéal, c'est avoir une raison de vivre. . . Si donner à l'homme un idéal, c'est donner une orientation à toute son existence, une raison et un ressort à tous ses actes, nous reconnaissons là le but dernier de l'éducation." Op. also R. L. Nettleship, on "The Theory of Education in Plato's Republic," in Dr. Evelyn Abbott's *Hellenica* (Rivingtons, 1890), pp. 71-2. "Against the all-powerful influence of society, Plato thinks that no private teaching can hold its ground. . . The real educator is public opinion itself, whose voice, resounding in the assembly of the law courts, in the theatre and the camp, is practically irresistible by the isolated efforts of individuals. Such a power for evil can only be counteracted by creating a power for good as penetrating, as unconscious, and as universal, and to do this is the true function of a public system of education." Auguste Comte defined the aim of the second period of a child's education (i.e., that from 14 to 21 years of age) as being "à développer la foi sous la présidence sacerdotale." ("*Système de Politique* Positive," vol. iv. p. 260.)

that this point of view is practically universal in Germany turns much of the most active thought and criticism of the day on to educational questions. The programme of the higher schools, and in a less degree that of the elementary schools, becomes a battle-ground of conflicting ideals of life, the point round which controversies of the deepest import to the public welfare tend to turn. And Dr. Reinhardt would himself be the first to allow that, in all that concerns the deeper interests of the nation, the higher schools are a factor of immense importance. They may not indeed be able, in a time of spiritual doubt and uncertainty of purpose to generate a new ideal of life; *τὸ πνεῦμα ὅπου θέλει πνεῖ*. But they may retard or hasten change. They may either be so staffed, organised and equipped, as to be able and ready at once to catch any new breath of inspiring purpose, and to bring it to bear on the picked youth of the nation at the age which is most impressionable to such new influences; or they may be so controlled in their programmes, or so inferior in the quality of their staff, as to have neither the freedom nor the aptitude to reflect the changes in the intellectual and moral aims of the time. Or, by carrying on an obsolete tradition in the choice of studies or in the methods of teaching, they may fail to train up the young generation with the habits of mind and the kind of knowledge necessary for the maintenance of national interests. They may thus become actually obstructive and perverse, or so ineffective as not to produce the trained and educated force, for which it is to them that the nation has the right to look. Either by neglect, therefore, on the part of the State, or on the other hand by over-control, the higher schools may begin to flag in their duty and become repressive or sterile. And of no branch of national education is this so true as of that part which deals with the most promising of the rising generation, which has its pupils the longest under its influence, and during the term of years when habits of thought most receive their ply.

VI.—Unrest in Prussian Secondary Education.

The Berlin Conference on Secondary Education, December, 1890.

Such then being the point of view from which the higher schools in Germany are regarded by public opinion, it is not surprising that at all times there is an abundance of criticism upon them, and that from the most opposite quarters. During the last ten years, however, the discussion has been almost continuous. "The educational parties," writes a critical observer, "fight among themselves at the present time with the ardour of religious fanatics, and nearly every one of the combatants demands that the Government should recognise the scheme which he himself advocates as absolutely right and the sole panacea."* In 1887-8 a petition, signed by no less than 24,000 persons, of whom about 70 per cent. were university graduates, was presented to the Prussian Minister of Education in favour of the

* Dr. Paul Cauer, *Staat und Erziehung*, 1890, p. 6.

summoning of a conference to discuss questions of school reform. In May, 1889, the Government of Prussia had it in Royal command to consider a number of important matters connected with the various grades of education. The Royal Decree contained the following passages:—"For a long time I have been occupied with the thought how to make the school useful for the purpose of counteracting the spread of socialistic and communistic ideas. In the first place, it is the province of the school to lay the foundation, by fostering the fear of God and the love of Fatherland, of a sound understanding of the conditions of Government and of social life. But I am obliged to recognise the fact that, at a time when social democratic errors and misrepresentations are spread abroad with increased ardour, the school must make more vigorous efforts to further the knowledge of what is true, of what is actually the fact, and what is practicable in the world. It must strive to establish, in the minds of those who are still young, the conviction that the doctrines of social democracy are not only at variance with divine command and Christian morality, but also actually impracticable and fatal in their consequences alike to the individual and the community. The history of modern times down to the present day must be introduced more than hitherto into the curriculum, and the pupils must be shown that the executive power of the State alone can protect for each individual his family, his freedom, and his rights. Young people must be made to realise how the Kings of Prussia have striven to raise the condition of the working classes in progressive development from the statutory reforms of Frederick the Great and from the abolition of villeinage to the present day. The teachers must also demonstrate by statistics the material and constant improvement which has taken place during the present century in the wages and the life-conditions of the labouring classes under the protection of the Crown."

The decree then proceeds to draw special attention to the following matters on which the Government is instructed to submit recommendations.

"1. In order to make the religious teaching more fruitful in the spirit indicated above, it is necessary to lay the greater stress on the ethical side of such instruction, and to confine mere memory work within the narrowest limits.

2. National history will have to deal especially with the history of our social and economic legislation and development from the beginning of this century to the present social enactments, in order to show how the Kings of Prussia have at all times regarded it as their special mission to bestow their fatherly protection on, and to uplift the material and spiritual welfare of, those of the population who have to live by the labour of their hands, and how, in the future as in the past, the working classes can only look for justice and the safety of their earnings under the protecting care of the King at the head of a well-ordered State. And, especially from the point of view of practical utility, by striking references to actual facts, it should be made clear even to young people that a well-ordered constitution under secure monar-

chical rule is the indispensable condition for the protection and welfare of each individual, both as a citizen and as a worker; that, on the other hand, the doctrines of social democracy are, in point of fact, infeasible, and that, if they were put into practice, the liberty of each individual would be subjected to intolerable restraint even within the very circle of the home. The ideas of the Socialists are sufficiently defined through their own writings for it to be possible to depict them in a way which will shock the feelings and the practical good sense even of the young . . ."

The decree concludes that, great as are the practical difficulties of realising the above-mentioned tasks, "no such doubts ought to deter the Government from addressing itself earnestly and with perseverance to the accomplishment of an aim, the realisation of which is of eminent importance to the welfare of the country."*

Two months later (July, 1889) the Government prescribed that the historical teaching in the secondary schools should embrace an account of the development of the social and economic conditions of Prussia from the beginning of this century to the social-reform legislation of the present day. It was ordered that in the highest class of all secondary schools with a course extending over nine years, (Gymnasien, Realgymnasien, and Oberrealschulen), instruction in these subjects was to be of a more detailed character. Warnings as to the ruinous character of social democracy are to follow the lines suggested by common sense, without entering into any minute discussion of socialistic theories. The impracticability of social democratic tendencies is to be proved by reference to the actual aims of social-democracy in a manner which can easily be understood by youthful minds.†

In the autumn of 1890, the Prussian Education Department convened an important conference to discuss certain problems connected with secondary education. Its meetings were held in Berlin from December 4 to December 17. The members of the conference, forty-four in number, besides official representatives of the various departments of State, were men of the highest eminence in Prussian education and public life. Among them were Professor von Helmholtz, Professor Virchow, Professor Paulsen, Dr. Bertram, (Stadtschulrath of Berlin), Dr. Frick

* Verhandlungen über Fragen des höheren Unterrichts Berlin, 4 bis, 17 Dezember, 1890. (Berlin, W. Hertz), pp. 2-5.

† See Paulsen Geschichte des Gelehrten Unterrichts, vol. ii., p. 590 note.

The *Lehrpläne* now in force for the higher schools of Prussia thus refer to this branch of instruction under the heading of Notes on Method in historical teaching (p. 48): "Unerring tact and great circumspection in the choice and treatment of the subject-matter are required in giving instruction on economic and social problems in their relation to the present time. By the careful avoidance of all bias; by causing the whole course of instruction to be pervaded by an ethical and historical spirit; by dwelling (in view of the social demands of the present day) on the facts relating to the historical development of the mutual relations between different classes and of the condition of the working population; and by pointing out the continuous nature of the advance which has been made to an improved condition of life and the ruinous danger of all violent attempts to change the order of society; the healthy good sense of our young people will be best enabled to form a judgment on the momentous character of certain social tendencies of the present time."

(the Director of the Francke'sche Stiftung at Halle), Dr. Holzmüller (one of the leaders of the movement for non-classical higher education), Dr. Schlee (Director of the Realgymnasien at Altona, where he has been carrying on for many years an important experiment in higher education), a few representatives of the higher clergy and two or three gentlemen distinguished in industry and commerce. Fourteen questions were submitted to the conference for consideration and debate. These raised the most important problems under review at the present time in Prussian higher education, and *mutatis mutandis*, in the same grades of schools in the other States of Germany. The deliberations of the conference, however, though two of its members came from other parts of the Empire, had special reference to Prussian conditions. On each of the fourteen questions, two or more members of the conference were invited to prepare beforehand a brief summary of their views. As far as possible, it was arranged that these memoranda should present in outline the various shades of opinions represented at the meeting. Before the conference met, the theses thus prepared were circulated among the whole body of members, with a view to focussing each section of the debate upon the chief issues raised by the question before the meeting. It is a common fault of educational conferences that the discussion straggles over too wide a field, that speeches on general questions and on particulars are intermixed, and that, consequently, the disputants often fail to come to a close grip on points of detail. So far as possible, such miscarriage was guarded against by the organisers of the Berlin Conference. The discussions lasted over several days; the general questions were taken first, the details and applications later; the printed theses gave direction to the debate under each head; and their authors in each case were called upon to open the discussion by addresses, stating in greater detail the point of view which they desired to commend to the Conference. At the close of the proceedings, the Conference voted on a series of resolutions, and the recommendations thus finally adopted were referred to a small committee for further examination and report. The special duty of this select committee was to ascertain in what way the recommendations of the conference could be practically adopted in the organisation of the higher schools. Ultimately the conclusions were embodied in the new edition of the official "Curricula and programmes of work for the higher schools in Prussia" (*Lehrpläne und Lehraufgaben für die höheren Schulen*), approved in December, 1891, published in January, 1892, and still in force.

The verbatim report of the proceedings of this Conference on higher education is a storehouse of valuable criticism on the aims and work of secondary schools.* Nothing so complete—so far as questions of curriculum, method, and educational aim are concerned—has appeared on the subject under official sanction in any language during this generation. Germany is probably

* "*Verhandlungen über Fragen des höheren Unterrichts.*" Berlin, W. Hertz, 1891, pp. 800.

the only country in the world where it would have been possible to hold a discussion at once so representative, so precise in the delimitation of its issues, and so definite in result. The reason of this is that nowhere else is the terminology of Secondary Education so exact. When a speaker refers to a particular type of school, everyone concerned knows exactly what the school stands for in scope of work and in curriculum. The terms used in educational organisation have there as explicit and recognised a meaning as have those employed in a branch of natural science. Ambiguity, equivocation and cross-purposes are thus confined within the narrowest limits. Furthermore, the internal structure of the various types of Prussian Secondary Schools follows certain general rules. The names of the classes are the same. Everyone concerned knows what is the normal standard of Oberprima (the highest class) in a Gymnasium, in a Realgymnasium, and in an Oberrealschule respectively. Similarly with all the other classes, it is possible for a speaker to use a fixed term and to rely on being at once understood. Nor are there various ladders of promotion in any one school. Each class does all its work in common, and, with rare exceptions, a boy remains in each successive class for one school-year and is then promoted. The terms of comparison are thus extraordinarily clear and exact. Misunderstandings about terminology being thus rendered practically impossible, the way is clear for the discussion of definite issues on points of principle. And, finally, to these considerations must be added the fact that, for the better part of a century, educated men in Prussia have been habituated to exact methods of thought and expression in the discussion of problems connected with secondary schools. Thus the Berlin Conference of 1890 was not a meeting of a number of eminent persons summoned to compare their ideas for the first time on the aims and methods of Secondary Education, each contributing thoughts privately formed on the basis of personal experience or personal observation. It was a set and public debate, on matters of principle and of educational machinery, by a representative body of men, each at once distinguished in his profession and at the same time well acquainted with the actual details of school work, familiar with the history of the subject and with the developments of public and expert opinion upon it down to the present time, and armed with the results of elaborate statistical inquiries extending over many years.

We can hardly conceive of such a meeting being held in this country with equal prospects of success. Here there is no exact classification of secondary schools either in theory or in practice. The curricula of the schools are not published, nor do they follow lines sufficiently uniform to admit of exact comparison between institutions which may be roughly grouped as belonging to the same grade. The classes are differently named and vary in number in different schools even of the same type. Inside each school (at least in those of the first grade) there is almost universally more than one ladder of promotion, so that boys in the same department of the school are working in different groups and at

different stages in different branches of their studies.* Moreover, a single English secondary school will often comprise what are in effect a number of schools under one head. With us, a given school may include a Gymnasium, a Realgymnasium, and even an Oberrealschule under one roof, often with some intermixture of boys from the various sections for certain work in common. We have no complete, still less any authorised, list of secondary schools. No one is in a position to say what is the quality, or even the scope, of the instruction given in all the schools, private and public, claiming in any one district to be secondary in character. Our statistics of secondary schools are avowedly and necessarily incomplete. Secondary education exists in England, but the real nature of our various secondary schools is almost as doubtful a matter as the topography of Central Africa.

For the reasons above stated, the proceedings of the Berlin Conference are specially valuable to English readers as helping to clear up issues which, here as there, are coming up for settlement. The educational conditions of the two countries are very different, because they have developed under different conditions; nevertheless, it may assist us to keep in view, though by no means necessarily following, the distinct divisions which have been established in Prussian higher education. A noteworthy feature of the Conference was the important address of His Majesty the Emperor at the opening session. In the course of this address, His Majesty touched on a number of points calling for consideration in German Secondary Schools. Referring to the need for certain reforms in curriculum, he remarked that "the course of training in the schools is defective in many ways. The chief reason is that since the year 1870 the classical philologists have been lodged in the Gymnasien as *beati possidentes*, and have laid the chief emphasis on the subject-matter of instruction, on learning, and knowing, not on the formation of character and on the actual needs of life. . . . The demands made in the examinations show that less stress is laid on practical ability than on knowledge. The underlying principle of this is that the scholar must, before all things, know as much as possible; whether that knowledge fits the actual needs of after life is a secondary consideration. If one talks with one of these gentlemen, and tries to explain to him that the youth must in some measure be practically equipped at school for actual life and its problems, the invariable reply is that such is not the mission of the school, that its chief concern is the training of the mind (die Gymnastik des Geistes), and that, if this training of the mind is rightly ordered, the young man is placed in a position by means of this training to undertake all the necessary tasks of life. I think that we cannot go on acting from that point of view any longer. . . . I am well aware that in many circles I am

* It is not intended to imply that in this point, or in that referred to in the following sentence, the English system is necessarily worse than the German. There is, as explained below, a great deal to be said in favour of each. What is here pointed out is the fact that the German system lends itself to exact comparison of aims and standards, and that the English system does not.

regarded as a fanatical enemy of the older classical education, and that my views are quoted in support of other forms of school training. But that is a mistake. Anyone who has been at a Gymnasium* and has seen behind the scenes, knows where the defect is. The chief defect is the lack of a national basis for the instruction. As the foundation of the studies of the Gymnasium we must take the mother-tongue. We ought to train up young Germans with a national spirit, and not Greeks or Romans. We must depart from the basis which has been the tradition of centuries down from the monastic schools of the Middle Ages, where Latin was the chief thing, with a little Greek in addition. That is no longer the chief thing. We must make the mother-tongue our foundation. . . . Similarly, I should like to see the national ideal more inculcated in questions of history, geography, and legend. . . . Before all things, we should be conversant with the history of our own country. In my school days the Great Elector was a shadowy apparition; the Seven Years' War lay actually outside our purview, and history ended with the French Revolution. The War of Liberation, which is the most important for the young citizen of the Empire, was not examined, and it was only through the supplementary and most interesting lectures of Herr Hinzpeter that I was enabled, I am thankful to say, to acquire information about these matters. But that is just the salient point. Why are our young people misled? Why do so many people make their appearance with confused, unthought-out schemes for the improvement of the world? . . . Because our young people do not know how the present state of things has developed, and that the roots of it lie in the period of the French Revolution. And therefore I am persuaded that, if we explain to our young people in a simple, dispassionate way, (*in einfacher objektiver Weise*), this transition from the French Revolution to the circumstances of the present century, they will comprehend present-day questions in quite a different way from hitherto.

"Coming to the actual occupation of our young people at school, it is absolutely necessary that we should reduce the number of hours of work. We ought not to strain the bow further or leave it as tense as it is. We must lessen our demands; in this matter we have actually overstepped the furthest limits of what is wise. Our schools, and I speak more especially of the Gymnasien, have undertaken a task beyond human strength, and have, in my opinion, caused an excessive over-production of highly-educated people, more than the nation can bear and more than the men so educated can bear. The expression 'academic proletariate' (das Abiturientenproletariat), which we owe to Prince Bismarck, is a true one. The whole body of so-called 'Hungerkandidaten,' especially those gentlemen who write for the Press . . . are a danger to us. . . . I will therefore approve the foundation of no more such schools in the future, unless their necessity can be proved. We have enough of them already."†

* His Majesty was himself at the Gymnasium at Kassel.

† "*Verhandlungen über Fragen des höheren Unterrichts*," pp. 71-5.

The chief conclusions of the Berlin Conference were as follows:—(1) In principle, only two types of higher schools should be kept up in future—*viz.*, (*a*) Gymnasien, with both Latin and Greek as an essential part of their curriculum, and (*b*) modern schools, without any classical teaching whatever. (2) In the meantime, however, it was to be desired that towns in which Realgymnasien (*i.e.*, Secondary Schools teaching Latin but no Greek) cease to exist, transitory provision of such a type of curriculum should be devised and permitted, with due regard to local circumstances. (3) A common basis (ein gemeinsamer Unterbau) for classical and modern schools was not recommended. That is to say, the Conference did not approve of such an organisation of the curriculum as would make the lower part of a secondary school the common avenue to two parallel upper sections, classical and modern respectively. (4) The Conference, however, agreed that local circumstances might render it expedient to approve certain forms of combination—*viz.*, (*a*) a course of study, including Latin up to a certain point in the school, and then forking off into two or more branches, *i.e.*, fully classical, semi-classical, and modern; or (*b*) the postponement of Latin in Realgymnasien to a certain point in the school at which the classical and modern sections would fork off. (5) In the Gymnasien, the number of hours of work should be lessened, such diminution to be effected partly at the cost of classical, and partly at that of other, studies. (6) The composition of Latin prose should lose its determinative importance in that branch of education. (7) The Conference recommended the introduction of English as a voluntary or obligatory subject in the curriculum of the Gymnasien, according to local circumstances. (8) Drawing should be made compulsory in some of the middle classes of Gymnasien. (9) The greatest stress should, under all circumstances, be laid on instruction in the mother tongue, and special attention should be paid to expression in translation into German from foreign languages. (10) Without increasing the number of hours given to history, the treatment of the subject should be made more thorough by revising the limits to the subject matter. (11) It was recommended that (*a*) in towns where there were only fully classical or semi-classical schools (Gymnasien and Realgymnasien), pupils in the three lowest classes should be allowed, in case of local need, to receive, in lieu of Latin, an increased amount of teaching in the mother tongue and modern languages—this instruction to be arranged in a parallel series of classes. (*b*) In towns where there were only modern (*i.e.*, non-classical) schools, pupils in the three lowest classes should, in case of need, be given the opportunity of learning Latin. (*c*) All curricula hitherto designed to extend over seven years, should be reduced to six years (*i.e.*, Progymnasien, Real-progymnasien, and Realschulen). (12) In secondary schools with a course designed to extend over nine years (Gymnasien, Realgymnasien, and Oberrealschulen) the curriculum should be so arranged as to offer a more or less distinct breaking-off point at the end of the first six years of study, in order to meet the case of boys who at that stage in their school career have to enter upon the duties of practical life. (13) The

maximum number of scholars in the *lower* classes of any secondary school should be 40.* (14) No secondary school should contain more than 400 scholars. (15) In the highest classes, parallel divisions should as far as possible be avoided. (16) The teacher's hours of class teaching should not exceed 22 in the week. (17) The proposed reduction in the weekly number of hours of school work should not be allowed to lead to any increase in the amount of home work, but the change would necessitate improvements in the methods of teaching (in order that the hours at the disposal of the teacher may be employed with greater economy of time and concentration of effort). This, in turn, would make the professional training of the teacher for his work even more indispensable than before. (18) The pecuniary and material position of the teachers should be improved. (19) Further limits should be set to the employment of teachers of special subjects (Fachlehrerthum) and the form-masters should be entrusted with more responsibility for the physical and intellectual well-being of their pupils. (20) Greater attention should be given to games, athletic exercises, and training in gymnastics. (21) Special care should be taken in matters of school hygiene, the latter being placed under the supervision of a school doctor. Teachers and pupils should be instructed in the principles of hygiene and "first aid." (22) Instruction in natural history, and such geographical and historical lessons as can be illustrated by the topography and antiquities of the neighbourhood, should, when practicable, be given in the open air. (23) Success in the leaving examination on the completion of the full course in a "six years" school, or in a corresponding examination on the completion of the work done in the six lower classes of a "nine years" school, should entitle the scholar to the privilege of "one

* From the figures given in the official *Statistische Mittheilungen über das höhere Unterrichtswesen im Königreich Preussen*, (Berlin, W. Hertz, 1897), pp. 44-85, it appears that the numbers in each of the three highest classes in the Gymnasien, Realgymnasien and Oberrealschulen (*i.e.*, the secondary schools with a nine years' course), are small. The following table shows the average for the whole of Prussia. In many schools the two highest classes are taken together:—

Name of School.	Type of School.	Average number in Class named.	
		Summer Half-year, 1895.	Winter Half-year 1895-6.
Oberprima (Highest class).	(i.) Gymnasium (Classical School).	17·2	16·5
	(ii.) Realgymnasium (Semi-classical School).	9·5	10
	(iii.) Oberrealschule (Modern School).	7·9	6·7
Unterprima (2nd class from top)	(i.) Gymnasium	20·7	19·5
	(ii.) Realgymnasium	13·1	11·9
	(iii.) Oberrealschule	9·6	9·7
Obersekunda (3rd class from top).	(i.) Gymnasium	24·6	20·5
	(ii.) Realgymnasium	20	19
	(iii.) Oberrealschule	20	18

In the six lower classes the numbers are correspondingly larger, but where necessary, parallel divisions (Parallelcöten or Wechselcöten) are arranged in each class, in order that the number of scholars under one teacher may not be too great for educational efficiency. But the official statistics, quoted above, do not show the average number of scholars in each of such separate divisions. For the organisation of the Parallelcöten and Wechselcöten, see *Special Reports on Educational Subjects*, 1896-7 (p. 448 note).

year's military service as a volunteer" (die Berechtigung zum einjährigen-freiwilligen Heeresdienst).*

The revised *Lehrpläne* or curricula for the higher schools, show how far these recommendations, and others of a more detailed character, were adopted by the Education Department. The most salient features of the new order were the encouragement of modern schools with no classics in their curriculum (especially modern schools with a six years' course, *i.e.*, ending as a rule at 16), the remodelling of the curriculum of the classical school with the object of emphasising modern subjects, the marked approval of physical training as a corrective of mental overstrain, and a certain measure of antagonism towards certain types of semi-classical schools.†

VII.—Movements of German Opinion with regard to the Aim, Methods, and Organisation of Secondary Schools.

There is a general belief in Germany that, taking it as a whole, their system of secondary or higher education is the best in the world. It is one of the great national institutions on which the country looks with justifiable pride. Though there is plenty of criticism of it in Germany, the critics usually take it for granted that the system, whatever be its faults, is at any rate better than any other system in existence. And, from many points of view, they are probably right. No one can study it without being struck by the very high level of intellectual attainment which it secures, and by the excellence of the instruction which it brings within the reach of families of moderate means all over Germany. So far as access to the best teaching is concerned, the average German family is in much better case than the average family in England. When, therefore, a German writer criticises the secondary schools in his own country, he generally does so, not in the belief that they are bad, but because they are so good that he wants to make them better. It is necessary to emphasise this, as otherwise the quotation of criticisms might convey the impression of a general dissatisfaction, which by no means exists.

But, in Prussia at any rate, the controversies on the subject of secondary education are far from having been closed by the publication of the new code. On the contrary, it is not too much to say that the signs of unrest tend to increase. And the most remarkable characteristic of some recent criticisms is that they strike down at those fundamental questions, which lie deep below any form of external organisation, and, though inactive in ordinary times, develop volcanic force during periods of displacement in moral ideals and of grave intellectual change. It is pro-

* Cp. *Verhandlungen über Fragen des höheren Unterrichts*, pp. 795-800.

† For an interesting account of the Conference, see Paulsen. *Geschichte des Gelehrten Unterrichts* (2nd edition), vol. ii., pp. 586-595. This account is criticised in some points by Dr. Holzmüller in an article, entitled "Herr Professor Dr. Friedrich Paulsen und seine Stellung zur Reform und Oberrealschule," in the *Zeitschrift für lateinlose höhere Schulen* 7/8 Heft, 8 Jahrgang (Leipzig, April, 1897). An extended survey of the significance of the new Lehrpläne of 1891 is given by Professor Paulsen in his above-mentioned work, vol. ii., pp. 595, seq.

bably true that in Germany itself those criticisms which challenge the root principles of the present educational organisation attract the least general attention. They naturally seem impracticable. It is almost impossible for those who are actively working in a highly organised system to take a purely objective view of its operations and influence. Nevertheless, to those who attempt to compare the educational system of one country with that of others, those criticisms are often the most instructive which strike the straightest at questions of fundamental principle. For those are the questions which do not concern one nation alone. They are, in fact, becoming urgent over the whole civilised world.

The educational problems, which are thus brought under review, fall into two main groups. First, what kind of men do we wish our secondary or higher schools to produce?* What attitude of mind do we desire to encourage in the rising generation towards the social and ethical problems of our time? What sympathies, ambitions, repulsions, do we think it best to stimulate and fortify in them while they are most sensitive to the suggestions (tacit perhaps, but none the less influential) which are implied in what they learn? What aptitudes and dexterities do we aim at imparting to them with a view to their later duties in life?

Secondly, what has been, and what is likely to be, the effect of placing secondary and higher education under the control, or the predominant influence, of the State? What is the tendency of such control upon the standard of attainment, upon freedom of intellectual development, upon liberty of thought? Against the advantages of such restraint and supervision—"test, stimulus, advice, dignity," not to speak of the more material advantages of such a connection—what are the drawbacks which must be taken into account, and how far can a middle course secure, in a sufficient degree, the advantages of freedom and of guidance, without merely entailing a measure of the evils of both?

Such are the two groups of questions which are raised in recent German writings on the subject of secondary education, and they are inseparable from any searching and practical inquiry into the points at issue. Much more is written in Germany on the first group of questions than on the second. But to an English reader what is said about the latter may seem the more important of the two.

First, as to the ideals of secondary education, I will quote an eminent German writer, who deems it necessary that the curricula of many of the higher schools should be readjusted to the new needs of our time. Reviewing in 1895 the present position of the secondary schools of Prussia, in the final chapter of his work on the history of Higher Education in Germany, Professor Friedrich Paulsen thus states his view:—

"For the majority of the scholars in our secondary schools, even of those who are destined to pursue their studies at some higher seat of learning, the cultivation afforded by modern languages and literature and by natural

* In this paper I am dealing only with the questions affecting the secondary education of boys. The corresponding grade of education for girls raises issues which differ in form and range.

science is a more indispensable matter than the so-called classical education. They need a kind of school oriented to the claims of the present day—a modern Gymnasium. Relieve the classical school from the burden of what must be to it an alien task, and it may, I grant, conduct a select number of scholars to a deeper, and therefore to a more really fruitful, study of classical antiquity—a province of culture which I should be the last to undervalue. One may, on the contrary, perhaps go so far as to say that there is still no sphere in which a pupil may be so quickly led to the free exercise of comparatively independent, and, so to say, scientific habits of thought as in the defined and limited domain of classical culture. Yet it must be allowed that schools, the curriculum of which is classical in this definite sense, will have no easy place in the coming century. We live no longer in the happy age when the German people, as Bismarck said, fixed their gaze on the hills of Thüringen. The capital of Germany is Berlin, not Weimar. The outlook of our time ranges across the seas. The active mind of the nations is centred, not on literature and art, but on gaining command over the forces of nature and on possessing the earth (auf die Eroberung der Erde). And this new point of view is not without its effect even on the thoughts and interests of the generation still at school. Can we deplore it? Would it help matters if we did? The wind bloweth where it listeth. The school cannot create the tendencies of the age, and therefore will do wisely to adapt itself to them." *

The following, on the other hand, are the views of a writer, of authority equal to that of Professor Paulsen, who regrets many of the changes which have already taken place in the curricula of Prussian secondary schools, and would fain, if it were possible, return to an earlier state of things. In the volume containing the *Recollections of his official life*, Dr. Weise, the veteran to whose services Prussian, and not only Prussian, education stands in so heavy a debt, thus summarises his impression of the gradual change which has been creeping over the tone of higher education.

"No unprejudiced and careful observer can escape the conclusion that, during the period over which I am able to look back, a gradual change has come over the spirit of our secondary schools. The spirit of school life is nourished by the spirit of the nation at large, and cannot remain unmoved by the changing tendencies of the time, under whose influence parents and children and teachers, and especially the younger generation, continually stand. Thus it has come to pass that the aim of education is now conceived in a very different sense from that which formerly prevailed, because, though many are unconscious of the change, the principles of training have become different with the changes in public life. The old traditional principles have not been so much surrendered as allowed to fall into the background in the presence of new and dominant influences. In place of the old education, based on Evangelical principles of Christian morality, there arose, under the influence of theories of æsthetic truth, the later ideal of building up a noble human personality. Both of these formative principles, and especially the first of them, have lost ground in the present age with its variety of political interests. There has arisen in place of them the thought of educating citizens. People are far more occupied with the calls of practical life than with endeavours after more theoretical ideals.† The value set on one or

* Vol. ii., p. 643. Cp. Herr von Bülow's speech in the German Imperial Diet, on December 6th, 1897:—"We are, I must admit, of the opinion that it is not advisable to exclude Germany, at the outset, in countries with a future before them, from engaging in competition with other nations. The days when the German abandoned to one of his neighbours the earth, and to another the sea, and when he reserved for himself the Heavens above—the throne of pure doctrinaire theory—(laughter)—these days are past." (Loud cheers.) (*Times* telegraphic report, December 7th, 1897.)

† A similar view of the change in educational ideals is taken by Dr. P. Cauer *Staat und Erziehung*, p. 6.

other of the different subjects of instruction varies accordingly, even in the minds of lads still at school. I have myself seen this taking place. I can clearly observe the tendency during the course of my own experience from my school-days to the present time. I know what a treasure of good influence our schools now, as always, have in store for the welfare of the German nation, and that the seed sown in confidence of their virtues may bear better fruit than we may imagine. My faith in God's providence preserves me in this, as in other matters, from pessimistic fears. But I see that very many of those who are now devoting themselves to the office of teacher regard the old German school of the Reformation as a discarded ideal. I am referring, not to the mere details of its organisation, but to the underlying principles of its work. . . . Our whole educational system is unmistakeably in a critical state."*

The same writer, in a little book which appeared last year, showed that the lapse of years had but deepened his misgivings.

"A comparison of the secondary schools of former years with those of to-day shows as its general result that at the present time there is hesitancy and vacillation of purpose as to their organisation and anxious experimenting in methods of teaching and in the ordering of their curriculum. In former days there was more continuity and simplicity of aim, and the result was a greater soundness in the foundations of elementary knowledge which they laid. We were soon at home within the narrower compass of our then curriculum, each part of which was intimately connected with the rest. To our study of the ancient writers we brought a feeling of mastery over grammatical forms, in the practice of which competent teachers had made us take delight. . . . To meet the demands of various callings and the claims of parents, the original curriculum of the classical schools has been curtailed in some directions, extended in others."†

And finally, while heartily recognising the eager effort with which the present generation of teachers is striving to accomplish its task during a time of confused transition, Dr. Wiese concludes that, under present conditions, throughout a large part of the higher schools of Germany, neither pupils nor masters can well enjoy the homelike sense of happy confidence which is caused by a firmly established system of regulations, familiar alike to successive generations of scholars.

Such are the views of a man who gave the best years of his life, first as teacher and then as civil servant, to the cause of higher education in Prussia. Some of the expressions which he uses may well be regarded, coming as they do from a veteran of ninety years, as coloured by an old man's wistful longing for the old familiar ways. But they are also touched by the deeper pathos of unavailing regret at spiritual loss. And they testify to a change, the effects of which are no less recognised by younger men. Dr. Paul Cauer, for example, after reviewing the changes which have come over secondary education in Prussia during the last three generations, remarks that the impression left on his mind by a survey of the facts is not a pleasant one. He discerns "many excellent intentions but many evil effects." ‡

A criticism from another point of view will be found in Dr. Hugo Göring's work on the "New German School." In language which, perhaps, would carry more weight if it were less

* Wiese's *Lebenserinnerungen und Amtserfahrungen* (2nd edition, 1886), vol. ii., pp. 86-7.

† *Über geistige Heimatlosigkeit in der deutschen Gegenwart*, by Dr. L. Wiese. (Berlin, Wiegandt and Grieben, 1897).

‡ *Staat und Erziehung*, p. 42.

impassioned, he contends that Germany has now reached that point in her development when a re-adjustment of education to the new conditions of intellectual life is not only possible but necessary. "In our time, the idea of a patriotic school has come to maturity."

"The present time calls for a system of education which pays as much attention to the claims of the body as of the mind, which devotes as much care to the training of the observation, the feelings, and the will, as to that of the understanding and the memory, and which causes the bright light of the present day and of realities to play on the growing consciousness of the scholar." "In questions of education, we must not give, as in former days, the decisive voice to classical scholars, philologists, learned students of German, Hebrew, Greek, and Latin, but to men who know the conditions of modern culture, who have studied the science and art of education, who have mastered the history of educational systems, and who are versed in the conclusions of modern medicine and of the theory of evolution." *

To turn now to the second group of questions—namely, those which concern the relation of the State to secondary and higher education—it will be found that there are two opposite tendencies in recent criticism. The one is in favour of making a still more effective use of State control in educational affairs; the other in favour of allowing greater scope for individual initiative. In a book,† which appeared in 1895, Herr von Massow attaches primary importance to problems of educational reform. He contends that there is urgent need for the upper and governing classes in Germany to raise the standard of their own education, in order that they may retain the leadership in affairs. To this end he proposes far-reaching changes in the scope of school and academic studies. He lays stress on the increasing necessity for the utmost economy in the use made of the years available for a young man's education, in order that he may enter on the profession of his choice with the necessary amount of knowledge. He recommends that Commissions should be appointed by the Government in order to review the whole period of the education of youths destined for each of the liberal professions; that these Commissioners should be partly chosen from the ranks of men eminent in those callings and partly representative of other kinds of practical experience; and that the Commissions, so constituted as to be each a microcosm of the best available knowledge on the subject, should plan out courses of education from the very beginning to the end of a youth's training, with exact regard to the time available for it, and with precise distribution of that time under the various heads of instruction, home work, private study, recreation, and even sleep. The work of these Commissioners would apparently be done under the supervision of the State, and their findings would possess the weight of public authority. Herr von Massow is careful to state that he is "far from wishing to reduce the free intellectual activity of the rising generation to regulation and routine," but, in view of what he regards as the urgency of the national need, he clearly considers it desirable that the whole force of the machinery of Government

* *Die neue deutsche Schule; ein Weg zur Verwirklichung vaterländischer Erziehung* (Leipzig, Voigtländer, 1890), pp. 117, 138, 177.

† *Reform oder Revolution* (Berlin, Otto Liebmann), chapter 2.

should be applied to the task of raising the ntellectual standard of the governing classes. "The State," he even goes so far as to urge, "must fix, for each calling, what general information a youth must acquire through private study, and how much time must be assigned to private study, alongside of his professional studies." Thus the Government would seek to remedy the intellectual evils arising from excessive specialisation, to train up a generation of officials, professional men and leading citizens fitted by the most perfect education and discipline to serve, as Plato would have said, as "guardians of the State."

Though these proposals are urged by Herr von Massow with great earnestness of conviction, their special interest lies in their being symptoms of a point of view which is apt to be encouraged by any great development of State control in educational affairs. The difficulty is to know where to stop. A highly organised system of public education has such immense power that there is always a tendency to look to it to secure new advantages for the community, and as a barrier against opinions which are held to be mischievous or anti-social.* Sometimes, however, it is not clearly perceived that a power of this kind, once effectively centralised, would not of necessity always be at the disposal of the same school of thought.

But, be this as it may, it will be admitted, alike by those who favour the extremer forms of State control and by those who dread anything approaching to collectivist organisation as perilous to future liberty of thought and to individual initiative, that no branch of education is of more essential importance than that which trains up the future leaders of the nation. It is on the picked few that in the long run most depends. It is *their* training and equipment for the highest duties which is at once the most fruitful and the most difficult task. It is of little use to multiply mediocrity a thousandfold if we do not at the same time ensure for the best intellects, drawn from all ranks of life and from all parts of the country, the finest training which the time can afford. The young people of very great ability and promise will always be comparatively few in number; they will be found scattered over wide areas and often in need of pecuniary help if they are to obtain the education they deserve. The problem of finding such, of sifting them out of their contemporaries, of giving them from a sufficiently early age the kind and length and quality of training which will best draw out all their powers and best fit them for their several tasks, is the chief problem in modern educational economy. It is not enough to spread over the country a great deal of the kind of education, which, for the picked intellects, is not the best of its kind. It is necessary, whatever else is done for children

* Thus, Herr von Massow, in his chapter on the education of the labouring classes, remarks:—"We need the school in the campaign against Social Democracy and, in order that it may carry on this campaign with success, we must furnish it with new weapons." Hence he argues in favour of bringing the elementary schools more entirely under the control of the Central Government. He would place all appointments of elementary school teachers in the hands of the Central Government, and throw the cost of their salaries and all other expenses connected with the Elementary Schools on to the Central Treasury.

of average ability, to concentrate the very best available education on those who are best able to profit by it, and to secure for them access to it at the early age at which the mind receives an easy bent. It is necessary to have schools to produce "the wholly skilled workmen, whose craft it is to work out the freedom of the nation."* But, in combining real liberty of organisation and of outlook with the regulations necessary to secure a high level of efficiency, lie the chief administrative problems which are still unsolved in this branch of education.

It is the need for greater freedom, on the other hand, that is urged by several other German writers on the subject of secondary and higher education. In an essay on the questions of reform in secondary schools,† written in 1881 by the late Gustav Rümelin, Chancellor of the University of Tübingen, the following passage occurs. The writer, it should be added, appears to allude specially to Württemberg, but his remarks were evidently intended to have a more general application; and, though there have been many alterations in details since the essay was written, his criticisms touch principles of organisation which have remained in effect unchanged. "The tendency to make things uniform; too much actual teaching; the similarity of the demands made on all scholars and in all subjects; the piling up both of the kind of work which involves strain on the reasoning faculties and of that which entails a great burthen on the memory; the system of special teachers in different subjects; continual extension in the range of material knowledge; and the worry of examinations (Examenshetzerei) make the practice of higher secondary education at the present time highly estimable and successful in results, but increase the tension of it and involve a continually growing strain on the powers of those concerned in it. . . . But I admit," Dr. Rümelin goes on to say, "that if even a moderate account were taken of these criticisms of mine, profound changes would necessarily follow in the curriculum, the methods of teaching, and the whole system of organisation of secondary schools." These last words touch the centre of the problem. The German system of organising secondary education is a thing at unity in itself, and does not readily admit of changes or additions which conflict in any way with its essential principles.

In his work on *The State and Education*, to which references have already been made in this paper, Dr. Paul Cauer maintains that in the history of secondary education in Germany during the

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* δημιουργοὺς ἐλευθερίας τῆς πόλεως πάνυ ἀκριβεῖς. Plato, Rep. 395. "Though Plato spends so much time in the *Republic* upon the higher branches of education, he is really contemplating them as intended only for a very few men; he thinks that the bulk of those who are educated would stop their education about the same time as we do now. It is only the small number who ultimately rule the State who go through the complete course. No one can doubt that, if it were possible to do something in this spirit for the training of the most influential people in the State, modern government would be considerably better than it is; for, if the function of government is the hardest and highest of all, it clearly requires the best training and the best instruments." R. L. Nettleship, *Philosophical Lectures and Remains* (Macmillan), vol. ii., p. 292.

† Printed in *Reden und Aufsätze*. (Neue Folge), pp. 538-67. (Freiburg i B and Leipzig; C. B. Mohr.)

present century, the measures taken by Government, whether disciplinary and protective or charitable and promotive, have often produced results contrary to those which were desired. "*Summum jus, summa injuria*," he adds, "is a hard truth which applies to other things besides the administration of justice." He appeals from "the administrative principles of Wilhelm von Humboldt, the civil servant, to the earlier ideals of the man of the same name." He insists on the difference which it makes to true efficiency among subordinates whether they feel themselves under the control of a personal leader or under that of merely official regulations. "In every field of joint endeavour which a living man can personally supervise and sway by his will, strict discipline is an excellent thing. Mischief begins when regulations govern instead of human beings, and the dead weight of an organisation determines things instead of the firm will of a personal chief." Hence he advocates "decentralisation as the Alpha and Omega of his scheme," denies that uniformity is necessary to true unity, and pleads that private schools (due guarantees being taken for their efficiency) should be encouraged in every way in order that opportunity may be secured for educational experiments.*

But a still more remarkable, as well as more recent, protest in favour of a looser organisation of secondary schools is contained in the final chapter of the new edition of Professor Paulsen's "History of Higher Education in Germany" (1897.)† He welcomes the controversies which rage from time to time about the position and curricula of secondary schools. They are a sign of life. Nevertheless, he considers that the discussions tend to focus themselves too much on matters of external regulation, on the privileges bestowed by the Government on particular types of schools, and so forth. Without for a moment underrating the importance of these issues, he implies that the educated classes take a less lively interest in the inner work of the schools, in their attitude towards great questions, than was formerly the case. The underlying reason of this change, if it be admitted to be the fact, is probably the hesitancy which is felt by great numbers of persons at the present time in regard to grave intellectual and moral issues. But Professor Paulsen ascribes it partly to the fact that, the State having taken the organisation of secondary schools so completely into its own hand, the educated section of the public is more and more inclined to leave the details, even when they involve great principles, to the Department and officials concerned. Pointing to the decay of private schools in Prussia, he admits that it is partly due to their being unable to compete against the superior privileges of the public schools, but he adds that, even if this be so, it proves that parents are thinking more of the material advantages which the schools can confer, than on their individuality of outlook, on the tone of their teaching

* Cauer, *Staat und Erziehung*, pp. 28, 71, 74-7.

† Paulsen, *Geschichte des gelehrten Unterrichts auf den deutschen Schulen und Universitäten*, vol. ii., especially pp. 672-7.

and on the religious standpoint which they may represent. In short, he finds the public, so to speak, numb and passive in regard to the attitude which a school should adopt towards the graver questions of belief. And it is clear that, over against an elaborately organised State system, small minorities, especially when bitterly opposed to one another, can much less easily secure schools to their own liking than is possible under the conditions which prevail in England. Nevertheless, Professor Paulsen looks forward to a great change.

"The final result of the struggle is likely to be, not the dominion of one party in the school, or the successive domination of all parties in turn, but greater independence and individuality, so that the different tendencies will prevail in different schools, according to the attitude and personalities of the men in charge of them, just as is now the case in the Faculties of different Universities. That the secondary schools in different places should be differentiated only by their number in a list is certainly convenient, from an outside point of view, to families who are obliged to move their residence from one town to another, but is not a mark of wealth of spiritual life. It is, however, towards spiritual things that the school of the future must direct its scholars. In those subjects of instruction which are taught in the mother tongue, a fixed line of march with officially authorised text-books would be insufferable. In this branch of school work the teacher's personality alone is the source of educational influence, and such influence can only do its work when the teacher is given freedom to frame his course for himself. But if the schools are allowed to individualise themselves, the interest of the parents will in consequence detach itself from dull questions of certificates and be concentrated on the more essential matters. People will inquire for schools and teachers in whose intellectual attitude and moral tone they have confidence. And if the result of this change were the rise of a demand for private schools with a fixed and distinct character of their own, I should regard it as a healthy movement. Indeed, it seems to me that a Government, gifted with far-seeing views and a profound regard for the healthy life of the nation, would deal with such tendencies not in a spirit of mistrust, but with ready co-operation. We are at the present day more exposed to the perils of a deadening external uniformity than to those of isolated effort and of dissipation of energy."

VIII.—Contrast between English and Prussian Secondary Education.

The passages quoted above will show that, alike in the positive and admitted benefits of State organisation and in the undercurrents of contemporary criticism, secondary education for boys in Prussia stands in almost an opposite position to that which it occupies in England. There is little doubt that, so far as wide range of all-round intellectual attainment goes, a higher average is reached in the average German secondary school than is the case with us.* Their secondary schools of high quality are more uniformly spread over the whole country than is the case in England. They are cheaper and more accessible to poorer

*I make this statement with misgiving; not because I doubt its truth, but because it is incapable of absolute proof so long as the great mass of English secondary schools are under no official inspection. I am very far indeed from saying that, even if all-round intellectual attainment alone be taken as the criterion of judgment, all Prussian schools will be found superior to all the corresponding English schools. That is almost certainly not the case. But the average is, so far as I have had opportunity of making exact comparison, higher there than here, if, that is, intellectual attainments alone be taken into account.

families of the middle class. On the other hand, our schools are more free to develope as they like; they represent a greater variety of standpoints; some of their characteristics are more strongly defined. Just as in Germany a minority calls for more freedom of organisation, so with us a minority calls for much stricter control. But inquiry would doubtless show that the prevailing opinion among German parents and teachers is strongly in favour of their present type of regulations, while in England there is an equally strong predisposition against anything tending to uniformity or highly centralised control. That principles so diverse should be maintained with such earnestness of conviction in each of the two countries points to the fact that there is positive and proved advantage to be derived from each system. Hence it is probable that each country has something to learn from the other, and it is expedient to attempt to measure the value of the different results of the two systems and to consider how far, without revolutionary change, each could secure some of the benefits which are the characteristic outcome of the other. From this point of view it is significant that some of the most interesting of recent experimental changes in the organisation of certain Prussian secondary schools show a tendency to approximate to compromises which are also being tried in England.

Apart from the larger differences of historical and constitutional development, which can never be ignored in any comparison of the educational systems of two countries, the most salient distinctions between the internal organisation of German and English secondary schools are three, viz., (1) the different principles of promotion from class to class; (2) the clear separation, prevailing in the German systems, of secondary schools according to the type of their curriculum and the normal length of their course of study, as compared with our plan of combining different "sides," *i.e.*, different types of curriculum in a single institution; and (3) the fact that, while the typical German secondary schools of the present day are day schools, the majority of our leading secondary schools are boarding schools. These differences go very deep, and affect the problem in the two countries in many ways.

As to promotions, the customary practice in English first-grade secondary schools is that a boy need not be in the same level of class in all subjects.* Mr. Pollard, the headmaster of the City of London School, in the chapter on Organisation and Curricula in Secondary Schools, which he contributed to the work edited by Mr. P. A. Barnett,† in speaking of a typical first-grade day school, points out that, on the classical side, "boys are re-classified for mathematics when possible, the principle being that the lower forms on the classical side constitute one 'block' for the purposes of such redistribution, and

* The practice in some of our *second-grade* secondary schools approximates more closely to the form of the German system. In former years the plan of teaching together all the boys in one class in all subjects prevailed in many of our first-grade secondary schools. But then, the curriculum was less varied than it has to be at the present day.

† *Teaching and Organisation with special reference to Secondary Schools. A Manual of Practice.* (Longmans, 1897), pp. 14 *seq.*

the upper forms constitute another 'block.'" Again, on the modern side, "in the higher forms great freedom of studies is possible, and the times at which different subjects are studied can be synchronised so that boys may be in one class for one subject and another for another." Mr. Pollard speaks of two other plans for organising secondary schools. In the first "boys are differentiated only by their choice of either natural science, Greek or German;" in the second, "the principle of organisation is that boys may be re-classified for every single subject of study, and it is possible for each boy to have a separate time-table, *i.e.*, to pursue a combination of studies unlike any other boy." The latter plan is, of course, very exceptional, but there runs through all these various schemes of organisation the principle, enforced in different degrees, that a boy need not work with the same class-mates in all the subjects of the curriculum appointed for each class in the school, but may be higher up the school in some subjects than in others. At Eton, for example, the time-table as analysed by Mr. Pollard, divides the school into six blocks, each consisting of several forms. For mathematics, French and science, the several blocks are sub-divided, and the boys in the block re-classified. In fact, it may be said that the normal type of organisation in our chief secondary schools is that in one great group of subjects ("form-subjects") promotion is progressive right up the school, but that in two or more other subjects—mathematics, modern languages and science—the boys are re-classified and are promoted in them irrespective of their position in their "form-subjects," subject to the condition that, at two or more breaks in the school, a line is drawn across the school, cutting off each of these parallel blocks from the corresponding sub-divisions in those departments of the school which are above and below it. Furthermore, a boy may gain promotion (alike in his form or in any one of the classes in which he is placed for certain other subjects), either term by term or at longer intervals, according to the place he wins by his term's work combined with the result of the terminal examinations, or by the latter alone.

Now such an arrangement as this is fundamentally different from that which prevails in German secondary schools at the present day.* There, the unit is the year's work assigned to each class in the school. The usual practice is to keep a boy for a whole year in each class. The task assigned by the Code of Regulations to each class in the school has been carefully adjusted, in the light of experience, to the school-time available in the course of one school-year. Each boy has to go through it, and the knowledge thus acquired by him at each stage is treated as the necessary foundation for the instruction which he will receive in the class above. Moreover, the whole class works in common at all the different subjects assigned to it in the curriculum. There is no separate classification for mathe-

* The following passages from a letter, written by Professor Emil Hausknecht, Director of the Twelfth Realschule in Berlin, clearly state the present German practice:—"In all our secondary schools we have *Jahreskurse*, *i.e.*, the subject-matter to be treated in one particular class is such that it requires a whole year (of 40 school weeks) to work through and repeat and connect with the sub-

matics, science or modern languages. The year's work is conceived as a whole, and it is held that boys should advance

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ject matter of the preceding class. 'Working it through' means utilising it for all sorts of didactical purposes, doing exercises on it, writing compositions and essays about it, looking at it from various points of view, making it the starting point of different problems and connecting it with other subjects. It is not so much the knowing of the subject, the mere amount of material knowledge, that the German system aims at, but rather at the training of the mental faculties, for which the subject-matter in the Jahreskurs is the substratum or the exercise ground.

"A boy always remains in the same class until he has mastered (or, at least, got a fair knowledge of, and practice in) *all* the subjects taught in that class. The system, by which a boy may be in a higher class in one subject than in some other, was done away with here some sixty years ago. Such a system is not compatible with the now prevailing idea of a Lehr-plan, in which the different subjects of the instruction do not run along independently of each other, but in which at least an attempt is made to establish some sort of interconnexion between the different subjects taught simultaneously. Of course, it happens that boys are strong in some subjects and weak in others. Our system is that boys can be promoted when they are found to be weak in one main subject, provided that they are at least 'sufficient' (genügend) in all other subjects. Their weakness, however, in that one subject must not be such as to make it impossible for them to follow and to understand the further instruction which will be given in that subject in the next class.

"On the average, out of a class of 40 boys, 2/3 will be promoted at the end of the year. The remainder, who are too weak for promotion, will be divided into two sets, viz. (1) those who are put back for half a year only; (2) those who are put back (zurückversetzt) for a whole year. Those in the second category are very few.

"This alternative arrangement is helped by our system of having, in most of our schools, two divisions or sets of classes, viz., the Easter division (die Osterklassen, called I^o, II°, etc.)., and the Michaelmas division (die Michaelisklassen, called I^m, II^m, etc.). The year's work (Jahreskurs) of the Osterklassen begins at Easter and ends in March in the following year. The year's work of the Michaelisklassen begins in October, and lasts till September in the following year. To take an example: a boy of the Easter Fourth Class (IV°), who fails at the end of March to get his promotion into III°, is rarely set back to IV° again (in which he would have to remain a whole year), but is generally put into the Michaelmas Fourth Class (IV^m), from which he has a chance of being promoted to III^m in the following September.

"It sometimes happens that a boy gets promoted after half-a-year's work, but very seldom, perhaps not oftener than once in 2,000 cases.

"It never happens that a boy is moved up more than one class at one promotion. Our boys, I am sorry to say, are not so exceptionally clever. There is, of course, a great difference between (say) the first four and the last four boys who get moved up from one class at one promotion; but the difference is not so great that the four 'good' boys are actually kept back in their work by the four who are only 'sufficient.' The dull, or weak boys, who might keep back the others, are left behind for a whole year, or for half a year.

"There are always some boys who are equally good in all subjects; but the number of those who have more difficulty in mastering some subjects than others is far greater. However, by working harder at those subjects for which they are not equally well fitted, the majority of these boys manage to become 'sufficient.'

"A boy of nine years of age is, as a rule, put in the lowest class (Sexta). In exceptional cases he may be put higher. But such exceptions are very rare indeed.

"It certainly is the effect of our German system to secure a high and uniform level of attainment *in all subjects*, though, of course, there are shades of difference in the attainments of different boys. Our system is to give at school a *very broad* general basis of knowledge (Allgemeine Bildung, not Fachbildung); no specialising at too early an age, but a very broad stock of well-connected general knowledge; a great deal of linguistic and historical knowledge on the one hand, with a fair amount of mathematical and scientific knowledge on the other—neither side being over-developed or prematurely developed at the expense of the other, though generally the linguistic and historical side does (or ought to) prevail."

together in all the subjects of curriculum, from point to point in a unified school-course.

This is a difference of far-reaching importance, and will be found to affect, in a greater degree than any other single cause, the quality of the intellectual effects of the secondary schools of the two countries. On the intellectual side, the tendency of the German system is to produce a much larger number of boys with a high average level of attainment in a wide range of subjects, very well grounded, highly disciplined, and quick to learn, especially when under instruction; on the other hand, (and still referring only to the intellectual side of school training), the tendency of the English system, *at its best*, is to give much more scope to individual talent, and, on the whole (though, of course, there are many exceptions to this), to produce a comparatively small number of first-rate scholars, keenly interested in their favourite subjects, vigorous in mind, accustomed to rely a great deal on themselves, and keen to pursue their studies to a higher point: *at its worst*, the English system turns out a much poorer article (from the point of view of intellectual attainment) than the German: when it deals with inferior material, it makes very little of it, so far as attainment goes. Thus, to regard the subject from another point of view, the German system tends to favour the average boy; the English system to produce exceptional excellence in a limited number of cases, at the cost of sacrificing, or rather failing to make the most of, a great deal of mediocre ability.* Their system is collectivist in tendency, ours individualistic. And the same contrast comes out when we compare the German secondary schools as a whole with our English secondary schools as a whole. There is much less difference, in point of excellence, between the best German Gymnasien and the worst, than there is between the best English secondary schools and the worst. A German teacher who studies our secondary education is always surprised at the gulf which separates our good schools from our bad ones. There is nothing like it in his own country, and he is apt to say that our best secondary education is, in the strict sense of the word, aristocratic in its tendency, *i.e.*, that it concentrates its best on the most promising boys and pays comparatively little attention to the ruck of common-place ability.†

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* The theory of some of the more old-fashioned supporters of the German classical schools is more nearly akin to our English point of view, viz., that the saving grace of a great school is to turn out a certain number of first-rate boys. Cp. the remarks of Dr. Jaeger, the headmaster of a Gymnasium at Köln, at the Berlin Conference on Secondary Education, in 1890:—"Ich sage aber vielmehr, das Gymnasium ist in erster Linie da, um jenes eine Viertel zu bilden, und wenn das aus lauter tüchtigen vollreifen Menschen bestände, dann würde das Gymnasium eine herrliche Mission erfüllt haben, möchte auch aus den übrigen drei Viertel nicht ganz so viel werden." (*Verhandlungen über Fragen des höheren Unterrichts*, 1891, p. 137.)

† It may be worth mentioning here that a considerable number of eminent German secondary schoolmasters have personal knowledge of the work done in English secondary schools. Of course, some distinguished masters in our public and other schools are German by birth and early education, though now permanently settled in England. But many others come over to England for a short time at an early stage in their career and find a place on the staff of some private secondary school, where the ages of the pupils range from 10 to 16 or 18 years.

In comparing the broad intellectual outcome of our English secondary education with that of Germany, regard should be had to the length of time which boys stay at the secondary schools in the two countries. There are no means at present of making exact numerical comparisons between the complete statistics of German and English secondary schools, but the figures, so far as they exist, show that on the average the German boy stays longer at school than the English. Just as in the elementary school, the German child leaves later than the average English child, so also in secondary schools for boys the average period of school life is longer there than here.

Their impressions of the intellectual side of these schools are rarely favourable. But many English teachers who have had experience in the same grade of school agree with them and even out-do them in the severity of their strictures. It is less common, however, to come across a German teacher resident in Germany who knows from the inside the work of any of our great public secondary schools for boys, or of one of that large and important class of private schools where little boys are prepared for the public schools. The result is that, in much German writing on the subject, an inferior (though frequent) type of English secondary education is compared with the normal German type. A very distinguished German secondary schoolmaster once said to me: "Can the two systems—the English and the German—be compared at all? Is the English system not more or less cram work—at least, in a great many subjects—aiming at hardly anything more than to fill a boy's head with mere knowledge?" Of course, this criticism does not apply to the best work done in our schools, but it was based nevertheless on real and wide personal knowledge of English secondary schools of a certain type. One of the most interesting of recent criticisms of English secondary education by a German writer is printed in the Report of the Realschule at Basel for 1895-6. It is from the pen of Dr. E. Thommen, and is called "A sketch of English educational theory and practice." The author bases his criticism on the result of several years' experience as a teacher in various English private secondary schools. He is very complimentary towards the physical and moral side of our secondary education, but the reverse of complimentary towards its intellectual side. He has evidently not had the opportunity of knowing one of our best schools but, with this limitation, his comments are interesting and instructive. He begins by saying that "it is an indisputable fact that the English system of instruction is as far behind the German, as the German system of training is behind the English in its effects on character." Referring to the intellectual side, he holds that the English secondary schools "hobble along a century behind the German." (Bericht der Realschule zu Basel, 1895-6. Wissenschaftliche Beiträge. Englische Pädagogik. Skizze von Dr. C. Thommen. Basel Bürgin, 1896.)

Of earlier German works on the same subject, the first series of Dr. L. Wiese's *Deutsche Briefe über englishe Erziehung* is a classic. Though written half a century ago (the letters date from 1850), the book is far from having lost interest and value. Its appreciations of the English public school system are marked by generous sympathy and searching insight. He summarises his conclusions at the end of the first letter (p. 12): "The result of my observations, briefly stated, is as follows:—In point of intellectual attainment our German secondary schools are far in advance of the English, but the latter are more effective in the training of character, since they fit their scholars better for the duties of later life." The second series of Dr. Wiese's letters was written in 1876. In this later collection, the problems of elementary education and of the State organisation of various grades of schools occupy a more prominent place. Dr. Wiese found English education in all its branches passing through an agitating period of transition. The result was that the letters of 1876 give a much less definite picture than those of 1850. This was inevitable, and the indistinctness in outline proves the accuracy of the writer's observations. The two series of letters are now published together in two volumes. (Berlin, Wiegandt and Grieben.)

Reference should also be made here to the able and comprehensive work by Dr. Karl Breul, University Lecturer in German at Cambridge, on the organisation of secondary and higher education in Great Britain, which appeared in 1897. (*Die Organisation des höheren Unterrichts in Grossbritannien.* München, Oscar Beck.)

This is partly a matter of ingrained national habit. A German middle-class household sets much more store by schooling than does an average family of the same rank in England, and educational distinctions have more social significance with them than they have with us. But much is also due to the influence of the examination for one year's military service—a test which comes at the end of the sixth year's course in a secondary school, *i.e.*, usually when a lad is sixteen years of age. Parents like their sons to get this certificate (Zeugniss zum einjährigen Dienst), because it is at once a mark of intellectual attainment, and a qualification which recommends a lad to commercial firms and other employers.* A further reason for the difference between German secondary education and the English is that the German secondary school provides much more of a definite course of instruction than do the mass of ours. The work of the school is carefully planned to cover six years or nine, and official regulations, public opinion and the advice of the teachers all combine to influence parents in favour of keeping their sons at school to the end either of the shorter or the longer course. There is a natural disposition to sit out the piece, instead of (as in a more disjointed programme) to leave after one or other of the "turns." At the same time, lively complaints are raised by many German

* The importance of this certificate as a qualification for employment in a good house of business is shown by the following advertisements taken at hazard from the "Clerks, etc., Wanted" column in a Berlin morning newspaper:—"Lehrling mit Berechtigung zum einjähr. Dienst gegen monatliche Vergütung gesucht.
"W. P. Buchhandlung, Französische Str."

"Lehrling mit Berechtigung zum einjähr. Militärdienst für das Comptoir einer Aktiengesellschaft gesucht."

"Das Export-Haus, E. A. Schäferstr. Berlin, S.O., sucht sofort einen Lehrling mit guter Handschrift. Zeugniss für die Berechtigung zum einj. Dienst erforderlich."

The form of the corresponding advertisements in a London daily paper shows that we have no analogous qualification which employers as universally recognise, or can as conveniently name.

"Youth (smart, well educated) wanted in merchant's office as junior clerk; must be good writer, quick and accurate at figures.—Apply, by letter, to B., Bishopsgate, E.C."

"Clerk wanted at once; good writing indispensable, and must be quick and correct at figures; shorthand a recommendation.—Apply in own handwriting, with full particulars, to C., Moorgate Street, E.C."

Thus, for this grade of requirement, the standard of general education is fixed for a German lad of 16 by the State examination for one year's military service, an examination conducted in the school itself, on the normal and entire course of school work, by a joint examining commission of teachers in the school, and of Government inspectors. In England, we have, indeed, a multitude of examinations, and it is well known that much evil as well as much good can be traced to their influence. But we have no uniform and universally recognised test like this German examination for one year's military service. We are too apt in consequence, to grope along with generalities like the "well-educated" of the English advertisement. And indirect results of the same cause are the habit of English parents of taking away their boys a year or two years before the German, and the tendency of English employers to encourage premature specialisation in shorthand and book-keeping instead of insisting on what is of far greater value—the basis of a good general education. Although the English boy may be "smart," smartness without the necessary knowledge is of less avail than it used to be.

The view taken in this note is confirmed by some remarks of Mr. King, High Master of the Manchester Grammar School, in his paper on "Some Difficulties of Day Schools," in Mr. Cookson's *Essays on Secondary Education* (Oxford, University Press, 1898), pp. 14 and 22.

writers at the tendency of parents to withdraw their sons at the close of the first six years of a nine-years' course. And the statistics show that, from the secondary schools with a course of instruction designed to cover the years from ten to nineteen, there is a great leakage of pupils at the point reached when two-thirds of the full course are done, *i.e.*, when the pupils are sixteen years of age or a little older.*

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* (1) The statistics for the secondary schools of Prussia for the year 1895-6 *Statistische Mittheilungen über das höhere Unterrichtswesen im Königreich Preussen.* Berlin, 1897, pp. 44-91) show that the distribution of scholars in the different classes of the various types of schools was as follows:—

(*a*) Nine-year Schools.

Type of School.	Name of Class.								
	VI.	V.	IV.	Unter III.	Ober III.	Unter II.	Ober II.	Unter I.	Ober I.
Gymnasien - - (Fully classical schools) - -	10,425 10,371	10,042 10,008	10,056 10,452	10,569 10,388	9,516 9,387	9,429 9,010	6,743 6,612	5,693 5,342	4,718 4,508
Realgymnasien - (Schools with Latin only) - - -	3,718 3,681	3,607 3,547	3,713 3,670	3,849 3,732	3,345 3,204	3,236 3,070	1,726 1,639	1,132 1,031	822 804
Oberrealschulen - (Modern schools) -	1,949 1,899	1,876 1,898	1,837 1,839	1,921 1,538	1,252 1,226	1,153 1,084	482 438	231 233	170 163
Normal age of scholars in the class - - -	Between 9 and 10 years.	11 years.	12 years.	13 years.	14 years.	15 years.	16 years.	17 years.	18 years and over.

[In each of the above squares, the upper line of figures shows the total number of boys in that class in all the Prussian secondary schools of the given type, in the summer half-year, 1895; the lower line of figures shows the corresponding numbers for the winter half-year, 1895-6.]

(*b*) Six-year Schools.

Type of School.	Name of Class.					
	VI.	V.	IV.	III.	II.	I.
Realschulen - - (Modern schools) -	4,163 4,147	4,137 4,129	4,310 4,215	3,285 3,223	2,372 2,362	1,713 1,589
Normal age of scholars in the class - - -	Between 9 and 10 years.	11 years.	12 years.	13 years.	14 years.	15-16 years.

[In the above squares, the upper line of figures shows the total number of boys in that class in all the Prussian Realschulen in the summer half-year, 1895; the lower line of figures shows the corresponding number for the winter half-year, 1895-6.]

Progymnasien (fully-classical schools with a six years' course), and Realprogymnasien (semi-classical schools with a six years' course) are omitted from the above table as relatively unimportant.

These figures show that, while the schools are fuller in the summer than in the winter half-year, the three highest classes in the nine-year schools are markedly less full than the six lower classes in the same schools. There is also a considerable falling-off in the three highest classes of the six-year schools.

(2) The following table shows the number of those who respectively sat for and obtained the leaving certificate in the nine-year schools in Prussia in 1895-6, and the ages of those who were successful.

It is, however, in the modern German practice of requiring the pupils in each class of a secondary school to work through the same course of study during the school-year, that (so far as the later period of school life is concerned) one of the fundamental differences will be found between their system and our own. But it should be noticed that in their earlier stages, the systems in vogue in the two countries are much less unlike. A German boy, who is going to receive what in his own country corresponds to a public school education in this, enters the big school when he is nine years old or thereabouts. If there is a preparatory department (Vorschule) attached, he may enter it as young as six and a half or seven. But it is at nine years of age that he is admitted to the lowest form (Sexta) of the secondary school proper and comes under the influence of the officially appointed curriculum. Now a boy, receiving the corresponding grade of education in England, often does not enter the big school till some time between his thirteenth and fourteenth birthdays. The previous four years (or thereabouts) will have been spent by him in a preparatory school, usually under private management, and often far distant from the great public school for which the boy is being prepared, except, of course, in the cases where there is a preparatory or junior department attached to the public school itself. In either case, however, the period of school-life which, in the German secondary school with a nine-years' course, is represented by the four lowest classes (viz., Sexta, Quinta, Quarta, and Unter-Tertia), will be spent by

(Including external scholars.)

Type of School.	Number of Candidates who sat for the Leaving Certificate Examination.	Number of Candidates who obtained the Leaving Certificate.	Number of successful Candidates who were					
			Under 17 years.	Between 17—18.	Between 18—19.	Between 19—20.	Between 20—21.	Over 21 years.
Gymnasien -	4,447	4,243	7	154	837	1,297	962	986
Realgymnasien	783	760	-	29	213	254	168	96
Oberrealschulen	160	154	-	6	36	46	41	25

The above table shows how much older are the youths in the highest class of Prussian (nine-year) secondary schools than those in the corresponding form of the similar grade of English schools.

(3) The following table shows the number of scholars in the various types of secondary schools in Prussia who obtained the certificate entitling to one year's military service (Zeugniss zum einjährigen Dienst) in the year 1895-6. In the nine-year schools this certificate can be obtained on completion of the sixth year's course (Unter-prima); in the six-year schools, on completion of the whole course.

Years in Course.	Type of School.	Number of Pupils who left the Schools in question with the Certificate for one year's Military Service.
9	Gymnasien - - -	1,518
	Realgymnasien - -	1,068
	Oberrealschulen -	611
6	Progymnasien - -	352
	Realprogymnasien -	592
	Realschulen - -	1,316

the English boy in what is in effect a separate school. In order, therefore, to compare the English system with the German, we must take into account, in the case of the former, the curriculum of the preparatory school or preparatory department, and it will be found that, however separate in point of situation and management this preparatory school may be from the great public school or schools for which it prepares its boys, there is in effect a very close relation between them. Even when a preparatory school sends on boys to a considerable number of public schools, the curricula of the latter are so far uniform that the same preparatory course is sufficiently adapted to all of them. There is some diversity in the entrance examinations, and a good deal of diversity in the entrance-scholarship examinations at the public schools, but the curricula of the schools are not unlike. And in the cases of a preparatory department attached to the public school itself or of a private preparatory school which sends on its boys more or less exclusively to a single public school, the organic connection between the curriculum of the earlier or later parts of the boy's school life is naturally all the closer. But if we compare the course of instruction appointed for the four lowest classes of a German (nine-years) secondary school with that given in an English school preparatory to one of our public schools, we find that there is a tendency in both cases to teach together the boys in each class in all subjects. There are exceptions, of course. Our system of competitive examinations for entrance scholarships at the great public schools is apt to encourage specialisation in the highest class of the preparatory school. In Quarta and Unter-Tertia (the corresponding classes in the German course) there is no such specialisation at any time. Here again, as in other points, the characteristic of the English system is to have recourse to individualising arrangements. But, speaking broadly, a common practice during the four years of English secondary school life which correspond to those passed in the four lowest classes of a German nine-years' secondary school is to teach together in all subjects the boys in the same class.* Thus Mr. Pollard, speaking of the *Junior* school in a representative day public school in England, says that "the time for teaching arithmetic and French "are synchronised so that a boy may be in a higher form for "most of his subjects and in a lower form for French and arith-"metic. *In ninety-nine cases out of a hundred, however, a boy is placed in the same class for every subject; "if his knowledge is not on a uniform level in various subjects, it "is desirable that it should become so*, but the arrangement for "classification exists to meet special cases."†

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* In some well-known English preparatory secondary schools, however, the boys are reclassified both for Mathematics and for French.

† Chapter on "Organisation and Curricula" in Mr. P. A. Barnett's *Teaching and Organisation, with Special Reference to Secondary Schools*, pp. 18-19. Longmans, 1897.

NOTE ON THE HISTORY OF THE "STANDARDS" IN ENGLISH ELEMENTARY SCHOOLS.

It is interesting in this connexion to note the conflict of the two tendencies, *i.e.*, towards a uniform course and freedom of classification respectively, in the sphere of English public elementary education. The ages of the scholars in preparatory secondary schools and in the upper standards of our public elementary schools practically fall within the same limits. So far, therefore, as the age of the scholars is concerned, the question at issue is comparable in the two types of school. In the preparatory secondary schools the State has done nothing to prescribe a curriculum. Indirectly, however, the requirements of the competitive examinations for entrance scholarships at the Public Schools have exerted great influence on the course of study in the schools which prepare boys for these examinations. In the public elementary schools, on the other hand, the first attempt of the State to indicate a curriculum was made in 1853 (minute of April 2nd), when direct capitation grants per scholar first became payable out of the Parliamentary grant. It was laid down that "three-fourths of the scholars above seven and under nine years of age, three-fourths of those above nine and under 11, and three-fourths of those above 11 and under 13 respectively, should pass an examination before Her Majesty's Inspector, or Assistant Inspector." The accompanying circular to the Inspectors prescribed an examination of the children above nine years of age, in two divisions, according to their attainments. But the Circular expressly states that "age is not the principle on which children are classified in a school, nor (unless coupled with the time that they have been under instruction) does it measure the merits of their teachers according to their proficiency," and it is clearly indicated that the "ordinary classes" of the school would differ in organisation from the "divisions" called up for the annual examination. The Duke of Newcastle's Commission, in its report published in 1861, laid great stress on the failure of large numbers of the elementary schools "to secure a thorough *grounding* in the simplest but most essential parts of instruction, *i.e.*, reading, writing, and cyphering in an intelligent manner" (vol. i., pp. 295-6). The Revised Code of 1861 consequently introduced a new system of annual grants, conditional *inter alia* on the number of scholars and their proficiency as tested by individual examination by the inspector. For the purposes of this examination, it was ordered that each school should be classified in four "groups," Group I. being confined to children between three and seven years of age; Group II. to those between seven and nine; Group III. to those between nine and eleven; Group IV. to children of eleven and upwards. A curriculum was laid down, in reading, writing and arithmetic, for each of these groups. (Arts. 43 and 44.) The revised Code of February 13th, 1862, added the proviso that "children under six years of age, in those schools of which the inspector is able to report that special provision is made for the instruction of infants, are not required to be individually examined," and children under six were excluded from Group II. and upwards. On March 28th of the same year, the term "group" was changed into "standards," and the plan of grouping by age was given up. By a subsequent Minute of May 9th, 1862, the four "standards" were increased to six by the insertion of intermediate stages in the compulsory curriculum, which, however, was still limited to reading, writing, and arithmetic; and it was further enacted that "*every scholar* for whom the (annual) grants dependent upon examination are claimed *must be examined according to one of the standards and must not be presented for examination twice according to the same or a lower standard.*" This change definitely established the rudiments of an official curriculum extending in yearly stages over the normal period of school life from six years onwards. But the curriculum had regard only to what Mr. Lowe called "the minimum of education." It was not an indication of what a good school ought to teach, but of what all schools must teach. Moreover, its introduction was (in view of the Report of the Duke of Newcastle's Commission) inevitably regarded by many as a punitive measure. So far as the standards went, they were connected in the mind of the teachers with the system of individual examination, a test which many regarded as misleading and inadequate in its practical operation, although the Education Department "strove from the first to obviate these drawbacks," and instructed its inspectors "to judge of a school as before, by a standard embracing its religious, moral and intellectual merits. But, as so large a part of the grant depended on rudimentary knowledge, there was a danger lest, in spite of the influence of inspectors in the opposite direction, the subjects which paid the school best should receive more than a due share of the attention of the teachers." (R.C. on Elem. Educ., 1888. Final Report, p. 19.) It was believed by some experienced persons that the Revised Code actually discouraged attention to grammar, history and geography, and depressed the level of the best schools. In 1867, Mr.

Corry's Minute offered increased grants with a view to "encouraging the presentation of a greater number of scholars for examination in elementary subjects and in standards better corresponding to their respective ages, and *to encourage instruction beyond the elementary subjects.*" But the limits of the compulsory curriculum were not extended, and thus the "standards" in their narrow sense represented more distinctly than before the barest minimum of instruction and not a broad outline of what a good elementary school should aim at providing. As time went on, the work of the compulsory "standards" became less and less conterminous with the curriculum of the schools and led to grave practical inconvenience. The "standards," instead of providing a framework which a school would naturally strive to fill with efficient educational work, came more and more to be looked upon as an awkward and narrow groove, which interfered with the natural classification of the scholars. The Code of 1884 (Art. 109 (*b*)) made an important change by directing the Inspector to satisfy himself that "in classifying the scholars for instruction, regard has been paid to their health, their age, and their mental capacity, as well as to their due progress in learning." At length the whole question of the "standards" and their bearing on educational efficiency was discussed by the Royal Commission on Elementary Education, which reported in 1888. The Final Report of the majority of the Commissioners (pp. 133, *seq.*) thus summarised their inquiry. "We were told," wrote the Commissioners, "that no system of standards strictly corresponding to ours is in use in Continental elementary schools; but that *a progressive system is adopted in them, under which children as a rule pass through a class in each year, with the result that, whilst more time is spent on the course, the teaching is much sounder than under our system.* Many continental plans of study for elementary schools are far more minute in apportioning the details of yearly work than the English Code. It is alleged that there are evils attending the use of standards which are neither few nor unimportant. *It is said the subjects in the standards must necessarily be arranged for an average school and for an average child, and so must be detrimental, more or less, to that which is above or below the average.* It is said that a child of quick and superior abilities is hindered from rising through the classes as quickly as is desirable, and that oftentimes *this operates more powerfully in inducing him to get away from school* than would any amount of success in his passing rapidly through his standards, for in the one case he chafes under a sense of being unfairly treated, while in the other his very success acts as a spur to urge him on towards the highest point of excellence to be gained in the school. The duller child, on the other hand, it is said, has to be pressed in order to be made to keep up with the rest of his class, and this all the more, if through his own irregular attendance, or in consequence of an inefficient teaching staff, his subjects get much in arrear towards the end of the school year. The teachers in many instances complain of the bad classification produced under the standards. One computes the error in classification to be from forty to fifty per cent., 20 per cent. of the children in a given standard being too low for their abilities, and 20 to 30 per cent. one or two standards too high. Another claims for teachers a free hand in the classification, even desiring to see all standards, except a "leaving standard," abolished. A third affirmed that, if he had the liberty he desired, he should transform his school from end to end.

"On the contrary, Mr. Matthew Arnold expressed considerable doubt about the advisability of entertaining any proposal to classify according to ability, and he much preferred the continental system of a class devoting a whole year to its prescribed curriculum. He would, indeed, have been willing to sweep away altogether the existing standards and, *in lieu of the whole system, he would have had the work for each class prescribed, the number of hours to be devoted to each subject carefully specified, the books to be used in each class approved,* and the teachers better trained; the one aim of the teaching being to secure that the principles of each subject of instruction are clearly set forth and thoroughly understood by the scholars."

In these last words we have the German system advocated, as against the "standard" system as it formerly prevailed. The latter, indeed, was far from being comparable to the system in the German elementary schools, mainly because it was less thoroughly thought out, and embraced far less variety of carefully graduated subjects, but also, because it was not accompanied by the requirement of compulsory attendance during the whole school course up to 14 years of age, and because it was affected by a system of inspection necessarily influenced by "payment according to the results of individual examination." In other words, the English elementary school teacher, under the old system of standards, did not enjoy the same freedom in educational method and the same kind of educational guidance, which are given to the teacher in the German elementary schools. The reaction against these admitted evils strengthened the tendency to demand, not a more precisely adjusted set of educational conditions, but greater liberty in the

classification of the pupils in the school. The majority of the Royal Commissioners recommended (p. 214) "that standards have been shown to be of too much value for the purpose of examination to make it prudent to dispense with them, but they should be carefully revised, with a view to some modifications in the method of examination, and, in the grouping of standards, especially in small schools; and *should be applied so as to give perfect freedom of classifying scholars according to their attainments and abilities.*"

In accordance with this recommendation changes were made in the Code of 1890. "Freedom of classification" was then encouraged by Art. 101 (*a*) (v.), which states that "the standards in which scholars are presented for examination need not be the same for each subject. The scholars examined will be examined in the classes in which they are taught." It is further laid down by Art. 101 (*e*) (ix.), that "scholars presented for examination need not be in the same standards in class subjects as in elementary subjects, nor need they be presented in the same standards in both class subjects. All scholars should be examined in the class subjects in the classes in which they are taught, and in ordinary circumstances they should be advanced not less than one standard in a year." But this important change was introduced in a guarded manner. The Revised Instructions to H.M. Inspectors in1890, pointed out that, though Art. 101 (*a*) (v.) "permits the separate classification, in certain cases, of scholars for examination in different subjects, such cases will necessarily be very rare, otherwise they will interfere seriously with the organisation of a school, and with the due responsibility of class-teachers." But the Instructions of subsequent years, slightly varied in successive editions, have indicated more fully the object of the above-mentioned changes in the Code as giving "freedom of classification according to the attainments, opportunities and abilities of the scholars." They suggest (§ 5 f.), that "while the present school year will be retained for financial purposes, a distinct school year may be adopted for educational purposes and divided, as in most schools of a higher grade, into three terms. If this arrangement were common, children might pass from school to school at any period of the year and find in each a class in their own state of progress, and thus the difficulty of classification of new scholars, especially in arithmetic, would be avoided." It will be noticed that the tendency of all these changes is to depart still further from the old idea (more nearly related to the present German system), of having a prescribed course of study in all subjects for each year of school-life. From 1891 to 1897, the Instructions also contained the following passage (eliminated from the amended edition of 1898.) (§ 16):—"The rule which prescribes that in ordinary circumstances a scholar should be advanced not less than one standard in a year is intended to apply to the child of ordinary capacity who has enjoyed the usual opportunities of instruction. The Code entitles the teacher to use freedom in classification, so that a scholar may be advanced in any one or more of the elementary subjects in which he is fit to be advanced, or kept back in any one or more of the elementary subjects in which he is backward."

Thus recent tendencies in English elementary education have been in the direction of sweeping away the very rudimentary traces of the German system, which (under peculiarly unfavourable conditions) made their appearance in the Codes of 1861-2. The older state of things confessedly entailed many of the drawbacks of the German system, without securing the advantage of a carefully graduated and progressive curriculum for all scholars during a normal period of school life. When, therefore, the last Royal Commission on English elementary education came to review the facts of the case, a great change was felt to be inevitable. The change might have been in the Germanising direction, as recommended by Mr. Matthew Arnold. Instead of that, the exactly opposite tendency prevailed, and at the present moment a foreigner studying our elementary schools might find it difficult to ascertain the precise educational significance of a "standard," or to arrive at a definition of the attainments which we regard as the normal outcome of a complete training in an elementary school. This is a sign of the strongly individualising tendencies at work in English education, even in that part of it which is constantly under the direct supervision of the State. It should also be added that those officially responsible for the changes have themselves, with few exceptions, been educated in secondary schools, and therefore familiar with the methods prevailing there.

IX.—The Intellectual Aim of Secondary Education as understood in Prussia.

Mr. Pollard's words, in the passage quoted above, that "if the boy's knowledge is not on a uniform level in various subjects, it is desirable that it should become so," are intended by him to have only a limited application. But the doctrine which underlies them has been applied in a much more sweeping manner by those who have successively become responsible for the direction of secondary education in Germany. They appear to have repeatedly asked themselves what range of intellectual attainment ought to be possessed by a boy on the completion of such and such a school course, and what ought to be the fund of actual knowledge acquired by a youth before he leaves school and enters the University? They have made a practice of putting this kind of question in regard to each type of curriculum and to each of the normal periods of secondary school training (*i.e.*, six or nine years). The result is that the German authorities have habitually formed a clear estimate of the range of actual knowledge and information with which a boy should be equipped at each stage of his school career, and at its close. In England, the corresponding questions are asked much less often and with much less precision. They are assumed, of course, in the regulations of the preliminary examinations appointed for the various professional callings. But our notions of the general culture (allgemeine Bildung), which should be the positive and normal product of a specific course of secondary instruction are both less exact and less exacting than those current in Germany. We do not set out in the same definite way to formulate our educational aim, to calculate the expenditure and to devise the means necessary to its attainment, and finally to assure ourselves by a kind of continuous audit, applicable to all secondary schools alike, whether we are succeeding in getting what we wanted. In other words, we are not in the habit of applying to education the same precision of purpose which we regard as natural in a manufacturer when he decides what kind of goods his factory shall produce, and reckons up the cost of actually producing wares of a given quality and texture.

It will be said that we have no right to press the analogy between education and manufacture; that the best outcome of a good school is ethical in its nature, and, therefore, not measurable by examination; and that any attempt to apply commercial tests to the products of school-life must fail to appraise the true value of school-training, and may incidentally degrade that training by directing the attention of the teachers too exclusively to merely intellectual results. That there is some truth in these observations will be admitted at once, and in the history of our educational system we can look back on a method of testing attainments which failed to take full account of many of the results best worth having. Nevertheless, on the purely intellectual side of school-work, there is all the difference in the world between knowing what you aim at and having no fixed standard or purpose. It will not be disputed that there is a range

of knowledge which a "well-educated man" ought to possess; that the range will alter from age to age according to the changing circumstances of the time; that our conception of what a man ought to know naturally varies with his profession or calling, and with the intellectual standard of the society in which he ought to move; that the specialised knowledge required by a man's business should be built up on a broad foundation of general culture; and that general culture necessarily involves a variety of elements which will be acquired by different men with different degrees of alacrity and effort according to their natural aptitude for different kinds of knowledge.

From the first decade of the present century, German (especially Prussian) statesmen and educational authorities have been constantly at pains to define their ideas of what should be the common measure of "general culture" among the educated classes, and to devise means for securing its diffusion through the agency of secondary schools. This combination of high educational ideals, with the opportunity of using administrative machinery in order to put those ideals to the test of general practice, has had no parallel in our own country. Not that England has lacked an equal succession of eminent teachers, who have striven to define the aim of our higher education. The names of Dr. Whewell, Dr. Arnold, the early *Edinburgh Reviewers*, Cardinal Newman, Mr. Herbert Spencer, Mr. Thring, Mr. Jowett, and Professor Huxley, are not less illustrious than those of the men who have rendered like service to higher education in Germany. But the English thinkers had not a highly organised system of public instruction ready to their hand. Though each in turn influenced some part of the machinery of educational administration, they could not generalise their ideas by modifying the curriculum of the whole system of secondary schools. In Prussia, on the other hand, new educational ideals have been much more rapidly translated into administrative practice. The actual studies in the secondary schools have been more immediately and deeply influenced by successive changes in the world of ideas. In the alterations which have been made from time to time in the curricula can easily be traced the direct influence of the changing intellectual outlook of the time. And such alterations are not merely changes on paper. They are enforced by searching methods of inspection and supervision. They may not operate with equal thoroughness in all cases, but they operate at least so far as changes in intellectual diet can affect the tone and temper of a school.

It by no means necessarily follows that such a state of things is the best. It may perhaps be held that, so far as history throws any light on the matter, the English instinct is against it. There was a time in the middle of the 17th century when some may have thought it possible to bring our system of secondary schools under the influence of a more definite standard of attainment. But, from the Act of Uniformity onwards, the various currents in our national life have flowed so long in separate channels that we can hardly imagine their ever being united in any such system of schools as exist to-day in Prussia. Yet it is at least conceivable

that State control might be made effective in regard to the intellectual standards of secondary education, without actually having the power to determine how the various schools should handle those subjects which touch religious belief and political sympathies. But such an arrangement would necessarily involve the recognition, if not the establishment, of a considerable variety of secondary schools in order to meet varieties of parental choice. Such a system, however, would necessarily be more expensive to maintain than one in which the State enjoyed, directly or indirectly, a practical monopoly in the provision of State education. There would be more schools to inspect, and, through having a great number of separate institutions, educational appliances, etc., would often have to be duplicated or even triplicated where, under the other system, one school would suffice. The system would present special difficulties in small towns and in thinly populated districts. It may, indeed, be argued that under no circumstances can the control or monopoly of the State in secondary education be absolute. When a moral or intellectual movement sweeps through a country, it will certainly, somehow or other and sooner or later, find its way into the schools, however elaborate the precautions taken to keep it out. But, nevertheless, State supervision can, under certain conditions, approximate fairly closely to complete control, especially in those grades of education where effective competition cannot easily be improvised by individuals. And it is open to argument whether the ultimate interests of human freedom are not better served by liberty of organisation even at the cost of much inefficiency than by protective regulation crushing private initiative. But the choice is not necessarily between these two extremes. Is it not possible to combine sufficient liberty of organisation and development with a duly high standard of tested efficiency alike in the material equipment of the schools and in the intellectual outcome of their work?

X.—The English Tendency to lay Stress on the Ethical, rather than on the purely Intellectual, Influences of Secondary Education.

This, however, raises the wider question, What is the function of the secondary school? The traditional English answer is that it should aim not so much at intellectual attainment as at character. "It is no wisdom," wrote Dr. Arnold, "to make boys prodigies of information; but it is our wisdom and our duty to cultivate their faculties each in its season, first the memory and imagination, and then the judgment; to furnish them with the means, and to excite the desire, of improving themselves, and to wait with confidence God's blessing on the result."* That

* In the *Quarterly Journal of Education*, 1834 (quoted in Mr. Findlay's *Arnold of Rugby*, p. 222). It has, however, been recently remarked by a distinguished headmaster in this country that "there is a danger of a new cant arising about the education of 'character,' as if honest work was not as bracing to the moral character as play, or any other ingredient of school life." Cp. also an interesting passage on the "confused ideas of culture and manhood," which are sometimes present in English discussions on secondary education, in R. L. Nettleship's essay on the "Theory of Education in Plato's *Republic*." (Dr. Abbott's *Hellenica*, Rivingtons, 1880), p. 102.

is to say that, while the school must lay the necessary foundation of knowledge, it should be esteemed rather according to its success in fitting boys to learn, judge and act rightly for themselves when their schooldays are over, than according to the measure of actual attainment with which it equips them.

This throws the stress on the ethical influences of school-life, and, while not ignoring the intellectual side of the training, consistently and definitely subordinates it to the moral. People, however, differ so much and so profoundly as to the form and subject-matter of that part of the teaching which specially aims at the inculcation of moral principle and at the shaping of belief, that our secondary schools have naturally, and one may say inevitably, become adapted to this variety of religious conviction, in order that parents may enjoy, so far as possible, the opportunity of sending their sons to schools where the teaching and observances are in harmony with their own faith. The fact that among us, by a sort of general consent, the moral influences of school training have thus been regarded as the most essentially important, has led to there arising in England a greater variety of secondary schools, enjoying the same kind of status in public esteem, than can probably be found in any country on the Continent of Europe. It will be admitted that a secondary school deals with boys at an age when, at any rate in a considerable number of cases, they are intellectually mature enough to understand something of the deeper differences which distinguish one form of faith from another. Whatever may be true of younger children (and it is a matter of common experience that at all ages boys, like men, vary in point of sensitiveness on these topics), many youths of from sixteen to nineteen years of age are, if not spontaneously interested in ethical and theological problems, at least not inaccessible to teaching about them. And it will be granted that instruction in the principles of moral obligation, whether such instruction takes the form of a religious lesson strictly so-called, or is implied in parts of the teaching of history or literature or economics, cannot in the full sense of the term be absolutely neutral without being colourless, and, therefore, as an educational instrument, comparatively inoperative. Nor, in the case of temperaments which are susceptible to these questions, will even instruction in the philosophy of scientific investigation necessarily be free from a certain kind of infectious influence. The atmosphere of a school is a subtle thing, and affects what may be called the permanent background of a boy's mind more than he may himself realise at the time or even afterwards. And the more we endeavour to intensify the moral influence of the schools, the more do we find that a large and indispensable part of the curriculum naturally becomes the vehicle of ethical teaching, based, consciously or unconsciously, on definite principles about which different opinions are held by different people.* This

* The effect of a certain kind of persistent teaching on the temper and bias of a young pupil's mind has thus been described by a recent writer: "Skilful repetition gradually fills the atmosphere around with certain current maxims, principles, doctrines, until an environment is established and the child grows

applies even to a group of subjects which at first sight might appear among the most remote from modern controversies—namely classical history and literature. Thus Dr. Arnold, who rightly stands as in a marked degree the representative of the English view of secondary education, found in his Thucydides or Tacitus the means of imparting principles of moral judgment.

"The study of such a work," he wrote, "under an intelligent teacher becomes the key of knowledge and wisdom: first, it affords an example of good historical evidence, and hence the pupil may be taught to notice from time to time *the various criteria of a credible narrative*, and by the rules of contraries to observe what are the indications of a testimony questionable, suspicious, or worthless. Undue scepticism may be repressed by showing

up in an atmosphere and imbibes all kinds of heavenly truths, almost without being able to say when it was and how." (Rev. Spencer Jones, in the *Commonwealth*, February, 1898). The writer is referring to religious instruction, but the same remark, *mutatis mutandis*, applies to direct teaching in all subjects which involve moral judgments and, in some measure (though only in so far as he is restricted to books chosen by his teacher, and is guided in his study of them by his teacher's explanations and criticism) to the corresponding parts of a pupil's private work. In a wider sense, it applies to all other forms of school discipline which, in Faraday's words, affect "the management of the mind," colour its outlook, and determine its way of approaching new problems. The bearing of different kinds of school studies on the pupil's intellectual tendencies is pointed out, from another side, by Mr. Herbert Spencer: "Not only for intellectual discipline is science the best, but also for *moral* discipline. The learning of languages tends, if anything, further to increase the already undue respect for authority. Such and such are the meanings of these words, says the teacher or the dictionary. So and so is the rule in this case, says the grammar. By the pupil, these dicta are received as unquestionable. His constant attitude of mind is that of submission to dogmatic teaching. And a necessary result is a tendency to accept without inquiry whatever is established. Quite opposite is the mental tone generated by the cultivation of science. Science makes constant appeal to individual reason. Its truths are not accepted on authority alone; but all are at liberty to test them—nay, in many cases, the pupil is required to think out his own conclusions. Every step in a scientific investigation is submitted to his judgment. He is not asked to admit it without seeing it to be true." (*Education*, pp. 49-50.) It was the maxim of a famous schoolmaster, at the time of the Reformation, "Grammatica in scholis facit miracula, catechismus in ecclesia." The significance of this maxim is implied in Faraday's remark that exclusive attention to literary studies in early life "does not blunt the mind . . . but, so far, gives the growing mind a certain habit, a certain desire and willingness to accept general ideas of a literary kind. . . . By that degree of habit, the mind is really injured for the reception of other knowledge. It takes up the impression that a certain kind of knowledge—what I call the real knowledge—the knowledge of things, is of no importance." (Public Schools Commission, 1864, vol. iv., Pt. 2, Q. 30-31.) Thus, thinkers, widely differing in their points of view, agree in admitting the intellectual, and incidentally even the moral, influence of parts of school curriculum, which at first sight may appear neutral and to involve no elements of controversy. I am far from wishing, however, to imply that a man's character simply depends on what he was taught at school. Diet is important, but physical constitution is a prior fact. The point was well put by Schopenhauer: "Our brains are not the wisest parts of us. In the great moments of life, when a man decides upon an important step, his action is directed not so much by any clear knowledge of the right thing to do as by an inner impulse—you may almost call it an instinct—proceeding from the deepest foundations of his being." (Mr. T. B. Saunders' translation "Counsels and Maxims," p. 112.) Nevertheless, there are wide limits within which each individual character may fluctuate in response to early influences. And in so far as time spent in school is co-extensive with those early influences, the curriculum of the school, the attitude of mind of the teachers, their point of view, the things which they do not so much say as assume, the habits inculcated, the observances prescribed, are all of deep moment to the child's future. Hence the earliest years of education are of such essential importance, and the atmosphere of the home counts for more in early education than the few hours spent in a day school.

how generally truth has been attained when it has been honestly and judiciously sought, while credulity may be checked by pointing out, on the other hand, how manifold are the errors into which those are betrayed whose intellects or whose principles have been found wanting. Now, too, the time is come when the pupil may be introduced to that high philosophy which unfolds 'the causes of things.' The history with which he is engaged presents a view of society in its most advanced state, when the human mind is highly developed, and the various crises which affect the growth of the political fabric are all over past. Let him be taught to analyse the subject thus presented to him; to *trace back institutions, civil and religious, to their origin*; to explore the elements of the national character, as now exhibited in maturity, in the vicissitudes of the nation's fortune, and the moral and physical qualities of its race; to observe how the morals and the mind of the people have been subject to a succession of influences, some accidental, others regular; to see and remember what critical seasons of improvement have been neglected, what besetting evils have been wantonly aggravated by wickedness or folly. *In short, the pupil may be furnished, as it were, with certain formulæ, which shall enable him to read all history beneficially; which shall teach him what to look for in it, how to judge it, and how to apply it.*" *

It is obvious that a great deal of *mechanical* teaching of history and other subjects does not raise these moral issues, and consequently slides over many difficulties. But it is at least questionable how far such mechanical teaching has any real educational value. In some cases, it is true, a teacher may intentionally adhere to a form of instruction which does not stir up latent difficulties, but the new trend of educational practice is all in the direction of vitalising the treatment of history and literature in schools. And an attitude of mind, a point of view, a reasoned conviction, a clear belief in the rightness of certain principles and the wrongness of others, are necessarily involved in any effective teaching of history, and of some parts of literature, whether classical or modern—not to speak of other necessary parts of school curriculum where the causes of difference of opinion lie more on the surface. And the more that parents insist on the ethical influence of the school, the less will they approve indifferentism in the teacher, except, indeed, so far as they are prepared to recognise indifferentism as one out of many shades of moral judgment. Mr. Herbert Spencer has pointed out that "facts from which no conclusion can be drawn—*unorganizable* facts," are worthless in themselves as a subject of instruction; his caustic criticisms on much school teaching of history, are based on the very ground that it does not "*help to illustrate the right principles of political action.*" "The chief use of facts," he adds, is "*in establishing principles of conduct.*" The aim of good historical teaching is to form the judgment and determine principles of action, whereas, he complains, "of the (historical) knowledge commonly imparted in educational courses, very little is of service for guiding a man in his conduct as a citizen."† But, here again, the fact is impressed on us that there must be some organising principle, some definite conception of what is truth and what is morally and politically right, behind the fruitful teaching of history. And, once this is

* Article on Rugby in *Quarterly Journal of Education*, 1834 (printed in T. Arnold's *Miscellaneous Works*, 1845, pp. 359-60).

† *Education*, pp. 32-37.

admitted, the fact that people deeply differ on many of the fundamental principles must be admitted also. A teacher of history, for example, may feel it his duty to inculcate patriotism, and may even go so far as to review historical problems in the light of Mirabeau's maxim "La petite morale est l'ennemie de la grande"; or, on the contrary, his conscience may constrain him to teach, with Count Tolstoï, that patriotism is a "gross imposture," and military exploits "detestable and pitiable."* It is clear, therefore, that the point of view taken in the teaching of history may raise difficult questions, so difficult indeed that the choice might practically lie between the more or less rigorous suppression of opinions distasteful to the government (a suppression which, it will be granted, might, under certain conditions, be deemed necessary to the maintenance of the established order), or the generous recognition of a great variety of opinions, and the approval of a corresponding variety of schools. Thus in Mr. Herbert Spencer's words, "in providing from day to day *the right kind of facts, prepared in the right manner*, and giving them in due abundance at appropriate intervals, there is as much scope for active ministration to a child's mind as to its body."†

It is the interdependence of all the branches of knowledge, and the fact that all are related to some fundamental conception of truth (whether such relation is consciously realised or not) that have necessarily made the subject-matter of education the occasion of controversy, and, so long as men differ from one another on the ultimate problems, the occasion of controversy it must remain.‡ And this is specially true of the branches of education which have regard to elder scholars, as by that time, in Milton's words, "years and good general precepts will have furnished them more distinctly with that act of reason which in Ethicks is called Proairesis; that they may with some judgment contemplate upon moral good and evil. Then will be required a special reinforcement of constant and sound endoctrinating to set them right and firm, instructing them more amply in the knowledge of Vertue and the hatred of Vice."§

* "When I think now of all the evil that I have done, that I have endured, and that I have seen about me, arising from national enmities, I see clearly that it is all due to that gross imposture called patriotism—love for one's native land. When I think now of my education I see how these hateful feelings were grafted into my mind. What once seemed to me right and important—love of country, love for those of my own race, for the organisation called the State, services rendered at the expense of the welfare of other men, military exploits, now seems to me detestable and pitiable. What once seemed to me shameful and wrong—renunciation of nationality and the cultivation of cosmopolitanism—now seems to me right and important." *My Religion*, by Count L. N. Tolstoï, translated by Huntington Smith, pp. 256–7. (London, Walter Scott).

† *Education*, p. 69.

‡ Cp. J. H. Newman. *The Idea of a University*. Discourse v., pp. 99-100. "The Sciences, into which our knowledge may be said to be cast, have multiplied bearings one on another and an internal sympathy, and admit or rather, demand, comparison or adjustment. They complete, correct, balance each other. This consideration, if well founded, must be taken into account, not only as regards the attainment of truth which is their common end, but as regards the influence which they exercise upon those whose education consists in the study of them."

§ Milton. *Tractate on Education*. (Pitt Press, reprint of edition of 1673, p. 13.) Milton, in this little book, sketches a plan of education for boys between twelve and twenty-one. The passage quoted above refers to a point in their training which clearly falls well within what we should recognise as the period of secondary, as distinguished from University, education. On a later

Those who know boys will admit that "constant and sound endoctrinating" may, if pressed too far, produce intellectual effects of a kind repugnant to the teacher himself, yet to say this is not to deny that schools may and do differ in the sympathies which they tend to foster in those who are responsive to this form of influence.

But thus to insist on the necessarily contentious nature of some of the questions raised by the curriculum of secondary schools, (and it is the problems of curriculum which are of the most essential importance, because they underlie and finally determine the settlement of problems of administrative organisation*), is far from amounting to a denial of large opportunities for mutual toleration or even for compromise. Certain difficulties in educational work, and especially in that of higher education, may indeed be pressed with great logical force to a point at which the public provision of education would become almost impossible, in consequence of the financial burthen which would be entailed on the State, if the latter had everywhere to provide the educational atmosphere desired by parents of every different shade of belief.† But, short of this, and granting that due provision be

page he recommends that, in due course, "Sundayes also, and every evening may be now understandingly spent in the highest matters of Theology and Church History ancient and modern." The aim of the whole course is comparable to that which has formed the best tradition of English secondary education, viz., "a compleat and generous education . . . which fits a man to perform justly, skilfully and magnanimously all the offices, both private and publick, of Peace and War."

* Cp. Mr. Herbert Spencer's words (*Education*, pp. 6 and 7). "The question which we contend is of such essential importance is, not whether such and such knowledge is of worth, but what is its *relative* worth. . . . In education, this is the question of questions, which it is high time we discussed in some methodic way. The first in importance, though the last to be considered, is the problem how to decide among the conflicting claims of various subjects on our attention. Before there can be a rational *curriculum*, we must settle which things it most concerns us to know; or, to use a word of Bacon's, now unfortunately obsolete, we must determine the relative values of knowledges."

† Cp. Mr. Edward Barnes' lecture on the "Progress and Efficiency of Voluntary Education in England." (Crosby Hall Lectures on Education, 1848, pp. 3-47.) "Whilst I believe that education is the duty of the people themselves, I am equally persuaded that it does not come within the province of Government, according to just views of what that province is, under a system of political and civil liberty. But I am, if possible, still more strongly of opinion that, wherever the duty lies, it is eminently the interest of the people to discharge it for themselves, and for these amongst other reasons. . . . 8th. That the question of education is implicated with that of *religion*, and therefore, the serious objections which apply to Government interference with religion apply also to Government interference with education. . . Let every system have an open field, and in the end the best will win the day. Let private schoolmasters receive fair play from the Government, and not be unjustly discouraged by grants of public money to public schools which compete with them. Every interference of Government tends to increase the necessity for that interference and the habit of it. The more Government interferes, the more likely shall we be to have a practical *Act of Uniformity* in regard to schools; and in my judgment, that uniformity, so far from being an advantage as many doctrinaires suppose, would be the greatest obstruction to improvement. . . . I frankly admit that we have still many wretched schools. I have been told by the *Morning Chronicle* that I am the advocate-general of bad schools. In one sense, I am. I maintain that we have as much right to have wretched schools as to have wretched newspapers, wretched books, wretched institutions, wretched political economists,

made for what may be called the more highly polarised beliefs, there appears to be, in actual practice, room for a tacit understanding that a public school should, as far as possible, provide what the large mass of average opinion in a country regards as neutral ground in matters of religious and intellectual controversy. The limits of such neutrality, however, can be but dimly defined, and will be found to vary at different times and in different schools. In short, the conditions of such a truce are determined by tact and good feeling rather than by any precise line of demarcation in opinion. This neutral ground will appear more extensive during periods of intellectual slack-water than it proves to be in times when the tide of controversy runs high. There is also a rather strong English feeling that a schoolmaster (as it is neatly put in the late Mr. Johnson's *Hints for Eton Masters*) should be "content to have pupils and not aim at having disciples." People think that a public schoolmaster should not take what they call "an unfair advantage of his position," and "browbeat the lad into faith."* Again, there are some who, like the souls in the vision of Er, the son of Armenius, "as the evening comes on, take up their quarters by the bank of the river of Indifference." But there are many English parents to whom it is a matter of the deepest concern to secure for their children what they regard as the right religious and ethical atmosphere during their years

wretched members of Parliament, and wretched Ministers. You cannot proscribe all these things without proscribing Liberty. The man is a simpleton who says, to advocate liberty is to advocate badness. The man is a quack and *doctrinaire* of the worst German breed who would attempt to force all mind, whether individual or national, into a mould of ideal perfection—to stretch it out or to lop it down to his own Procrustean standard. I maintain that liberty is the chief cause of excellence; but it would cease to be liberty if you proscribed everything inferior. Cultivate giants if you please; but do not stifle dwarfs. The servants were well-intentioned, not wise, who proposed to pluck up the tares, for there was danger that they should root up the wheat with them."

It should be noted, however, that Mr. Baines at a later period in his life (1867) signed the Report of the Schools Inquiry Commission, of which he was a member, though it recommended the establishment of a Central Authority, Provincial Authorities and County Boards for secondary education. The existence of misused endowments rendered some form of State interference inevitable. And Mr. Miall—who in another of the Crosby Lectures (1848), had spoken with nearly equal warmth against the interference of Government with popular education—was a member of the Duke of Newcastle's Commission on elementary education, and in 1861 joined in signing its Report. That Report (vol i., pp. 297-9), contains an instructive comparison of the views of those members of the Commission who thought it desirable that the State should offer assistance towards the maintenance of education, and of those who believed the interference of Government with education to be generally undesirable. But this fundamental difference of opinion did not prevent the Commissioners in joining in a united Report, which was far from weakening in any way the control exercised by the State over elementary schools. Those who preferred non-interference found themselves in a minority on the Commission, and, therefore, joined with their colleagues in an effort to make the best of what they doubtless regarded as, in principle, a bad system. "They" (i.e., those who thought that annual grants for education should be gradually withdrawn) "have felt it their duty to regard the question as it stands, after twenty-nine years of a policy opposed to their own; and, on the rejection of their own view, they cordially adopt, in the second resort, the scheme of assistance approved by the majority of their colleagues, which they regard as better in every respect, and above all, as a far nearer approach to justice than the present extremely partial system" (p. 299).

* *Hints for Eton Masters.* By W. J. (written in 1862). (H. Frowde, 1898), p. 15.

of school-life. And the more the formation of character under ethical influences is regarded as the chief task of education, the more varied must at all times be the provision of alternative schools. The history of English education during the last fifty years shows how general, on the whole, has been the desire to show consideration to the different, and not always compatible, claims of different forms of religious belief. But the prevalence of this desire, and (under an appearance of some indifference) an instinctive sense of the difficulties of the problem have been among the chief reasons why it has not hitherto proved possible to establish in this, as in some other countries, a unified system of secondary education under the supervision of the State.

Note.—The following recent expressions of opinion, which bear on the subject referred to in the foregoing section are quoted here as indicating three different points of view.

"The school is the church of the future; the teachers are its priesthood. Perfect freedom is therefore essential. If, as is the unconcealed aim of many ardent educationists, no one is to be allowed to carry on a school who has not obtained an authorisation from a Government Department and whose scholars do not satisfy its examiners, we shall be on our way to a centralised tyranny, which would soon have a benumbing effect upon educational progress. An official standard of philosophic and scientific belief would insensibly but surely arise, not perhaps embodied in articles to be subscribed by candidates for educational posts but practically imposed by a jealous antipathy to innovation. Teachers venturing to reject the official doctrines—say in biology or sociology—or even suspected of questioning them, would find their careers blocked. None but those who combined mental originality with contempt for wordly prosperity would indulge in the luxury of independent thought and speech. Under such a *regime* progress would be slow. It is in the more advanced education, and particularly in those higher sciences where so much remains unsettled, that State control would be most mischievous." (Mr. E. S. Beesley in the *Positivist Review* for June 1893.)

The following passage is taken from a paper on "Catholics and the Public Schools" read by the Rev. John Norris (Oratory School) at the Third Annual Conference of Catholic Colleges upon Secondary Education (May 11, 1898). "I can from my own experience testify to the increasing amount of talk amongst Catholics, and they are not always slack Catholics, about the injury and loss they have to bear because they cannot send their sons to the public schools. To be candid, gentlemen, one cannot help sympathizing with their feelings. Eton and Harrow, Winchester and Rugby, Charterhouse and Westminster are stirring sounds in English ears; they are part of the national heritage; they are inseparable from the nation's history and are very near the nation's heart. They have come down to us from a far-off past: their traditions are hoary with age, as their buildings are grey with years; in spite of all that has happened, there still hangs around some of them the fragrance of the Catholic piety that set them up in the land: they are the training ground of England's great men: within their walls are to be found learning, culture, refinement and many other beautiful things that appeal strongly to us all, and are of real value in social life, in short, all those things that impress on a man that indelible mark, indescribable, but real, which distinguishes a public school man from the rest of his fellows. I am ready and willing to allow all this, and much more, if you will, and yet I am compelled to say, with full deliberation, that no Catholic boy should ever be allowed to enter a public school; that to send a Catholic boy to a public school is to expose him to dangers such as no loyal Catholic can even contemplate with equanimity, is to deprive him of a training in spiritual things to which he has a right as a child of the Church, and without which he will never imbibe the true spirit of a Catholic; is, in a word, to run the risk of making him a cold and indifferent Catholic, without fellow-feeling with his brethren, probably critical in spirit and disloyal, who will not edify by his practice and whose sympathies will be less with the Church than with others.

"*There is first the danger to the boy's faith*: and this danger is both positive and negative. He will of course be excused attendance at chapel and prayers, and all direct religious instruction, but, in the nature of things, he cannot be

excused very positive religious instruction. All day long all through the school year, he will be under the influence of a powerful solvent, as sure and effective as the action of the weather on certain kinds of stone. In the class room he will be under men of various views, one high, another low, a third broad, one will be rationalistic, another materialistic, and all will have little respect for the faith of the one or two little Catholic boys they may come across. They will not of set purpose interfere with a boy's faith—I trust not and believe not—but, even if that is secure, they are but men after all, and you cannot expect that they will guard their words and avoid suppressing their opinions for fear of the one boy in their class: it is too much to expect that they should even think of it all: and if a man is an earnest teacher, he must in a thousand different ways impress his own mind on to the mind of his youthful pupil: *Ex abundantia cordis os loquitur*: and if the teacher is sincere in his religious views he must bring out what is in him, indirectly perhaps, but none the less positively. The greater his success as a teacher, the greater his influence, so much the more danger for his pupil. We all know how great the influence of a good master is: how boys first admire and then begin to imitate: how eagerly they imbibe all that such a master says, how they make his views their own and how loyally they cling to those views. To say the very least, to put a Catholic boy of fourteen into such a position is to put him into imminent danger out of which he is not likely to emerge without serious damage to his faith, even if it is not completely killed, and this without any fault on the part of his teacher, without any breach of faith or any want of consideration."

Speaking at Birmingham on July 27, 1898, the Archbishop of Canterbury is reported to have said (*Times* report, July 28). "In this country there was necessarily a very considerable difficulty in dealing with the religious part of education, because there were so many different opinions among them, and every man had a right to his own opinion. Therefore, every man had a right to have something to say as to the religious education that should be given. Very often now they heard a great deal said, and said moreover, in his judgment, in a very mistaken way, about the necessity in these matters of religious equality. He entirely went with the doctrine of religious equality, but he very often thought that some people meant by equality in religion having no religion at all. There were other forms of religious equality. It was said, and not only was it said but it was acted upon, 'give religious instruction, but let every teacher give the instruction which he likes to give,' trusting it entirely to the schoolmaster. But it seemed to him that a parent had no right to entrust his child to the religious instruction of one who might be teaching the very contrary of what the parent himself believed. He thought it was good that parents should choose for themselves what religious instruction the children should receive. The responsibility was placed by God upon them, and they ought to take it up. He wished to see schools that were suitable to the different opinions of religious people. Let there be schools to instruct the Wesleyans; let there be schools to instruct the Quakers; schools to instruct the Independents, and so on. Let them have schools to suit the needs of everyone, but for the same reason let there be schools to instruct the children of members of the Church of England."

It may be added that the desire for variety in secondary education, correspondent to variety in religious belief, is felt by many persons in France at the present time:—

"Qu'on fasse un essai de la liberté, sur le terrain de l'enseignement secondaire. Qu'on cesse de mesurer la liberté d'une main avare et jalouse; qu'on la donne pleine, large et entière, telle que la conçoit un esprit qui ne se laisse pas aveugler par les passions de secte.

"Liberté pour tout honnête homme, fût-il prêtre ou religieux, de se vouer, si cela lui plaît, au dur labeur de l'éducation.

"Liberté pour le père de famille de confier ses enfants aux maîtres de son choix.

"Liberté pour le fonctionnaire; qu'il soit bien entendu qu'il ne perdra pas son gagne-pain, parce qu'il aura préféré le collège libre au lycée de l'État."

L'État et ses vrieux dans l'enseignment secondaire, par Le P. Joseph Burnichon, S. J. Paris, Librairie Ch. Poussielque, rue Cassette 15, 1898, p. 44.

XI.—The Growing Need for more Knowledge in the various Branches of Professional and Commercial Life. Effects of this change on Methods of Secondary Education.

Just, however, as it cannot but be the tendency of a strictly unified system to disregard at any rate the minor shades of religious difference and to place small minorities in a position of some relative disadvantage; so, on the other hand, it is the characteristic weakness of the opposite system to fail in securing as high an average level in intellectual attainment. There are many signs that this is the point at which our gravest educational peril lies. In order to excel in a profession, in commerce, in industry, it is becoming necessary for a man to start by knowing a great deal more than used to be the case. Not that mere knowledge avails without energy, initiative, imagination, judgment, character. But these virtues need for their successful exercise a wider basis of knowledge than before. The different parts of the world are coming to closer quarters with one another. There is increasing mobility, not of capital only, but of expert knowledge coupled with industrial enterprise. Distant markets are less isolated. Economy in production is becoming more universally a necessary factor in success. The amateur, however brilliant, is finding it harder to contend against the expert. The organiser has to take into account an ever widening range of interconnected facts. The outcome of all this is that the need for a good foundation of sound and well-chosen knowledge is being felt by classes in society, for whom, not very long ago, much less actual knowledge sufficed. They made up for lack of knowledge by their great energy and enterprise. But the game is getting harder for them, because there are more players, and among the players are rivals who are intellectually better equipped. It is not mere information that is wanted, but the trained power of getting information, of analysing it, testing its accuracy, dovetailing one piece of information into another, of applying it with economy and address. The searching discipline, which a good secondary school can give, trains the faculties, and at the same time gives the sound and lasting basis of general knowledge, on which in later life the more advanced studies of the professional man and the practical experience of the man of business can be built up. Nor is it only, or indeed mainly, for reasons of personal profit in professional or commercial life that this wider range of general culture is becoming more necessary to more people every year. A similar need arises out of the growing complexity of the duties of citizenship both in Imperial and in local affairs. Day by day there arise in Imperial and municipal affairs questions which involve fundamental issues in ethics and economics. We look to our secondary schools to send out successive generations of intellectual leaders: and in order that the eminent few may effectively lead, they must be able to appeal to large circles of well-educated opinion—intelligent alike in the criticisms they utter and in the approval they bestow. And in

the sphere of intellectual activity, in the study of the problems of conduct and belief, the different parts of the world with their different bases of thought and conduct are coming to closer grips. There is an ever-growing necessity for more disciplined intelligence, for more knowledge, for the kind of training which enables a man to see quickly the connection between things, to test an argument, to "prove" his own conclusions, to follow up clues, to marshal evidence, to get behind mere phrases into the heart of things. A really good secondary education, up to sixteen or nineteen as the case may be, does for a man what he can rarely do for himself in later years. It drills his intelligence, while the powers are still supple, and it presses into his mind, while the memory is still retentive and undisturbed by outside cares, a well-set foundation of necessary knowledge. But all over Germany these advantages have been made more accessible to the children of families of small means than is the case in England. The middle classes of this country, and the boys of promising ability who are born in humbler station, are at a disadvantage, and year by year at a relatively greater disadvantage, in a matter of rapidly growing international importance. The German secondary schools do not specialise; they excel because they make it their chief duty to lay a broad foundation of general culture, and the leaders of the professions and the authorities of their unrivalled higher technical schools agree in regarding this high level of general culture as an indispensably necessary preparation for their own more specialised work. It is in this sense, as Cardinal Newman said, that "if a liberal education is good, it must necessarily be useful too."

It is true that in planning any course of school studies we have to remember that the time available is narrowly limited. "No doubt," wrote Professor Henry Sidgwick in his essay on "The Theory of a Classical Education,"* "the studies of boyhood must be carefully limited and selected; but they may be representative of the diversity of the intellectual world in which men live. A boy must not be overwhelmed in a mass of details; he ought to be forced by all possible educational artifices to apprehend facts and not to repeat words; but in order that he may attain a thoroughly cultivated judgment according to the standard of our age, his education must be many-sided, he must be initiated into a variety of methods." Since these words were written the need for such an education has become at once more urgent and more widely diffused.†

* In "Essays on a Liberal Education" (Macmillan, 1868, p. 136).

† The bearing of this kind of general education on commercial prosperity is pointed out in the Report, presented to the Technical Instruction Committee of the City of Manchester by the Deputation appointed to visit Technical Schools, Institutions, and Museums in Germany and Austria, July and August, 1897. (Manchester, Henry Blacklock.) "It is by no means a difficult matter to trace to *the influence of the schools and the system of education generally* the improvement which has marked the manufacturing progress of Germany and especially the unique position occupied by the chemical industries in that country."

The wider significance of the general education given in good secondary schools is discussed in Cardinal Newman's *Idea of a University* (Discourse viii., pp. 164, *seq.*). "If a liberal education is good, it must necessarily be useful too. . . . General culture of mind is the best aid to professional and scientific study,

Faraday, in discussing this question from another point of view, dwelt on the necessity of a broad and varied basis for the education to be given in secondary schools. He was protesting against the narrowness of the old classical education because he had found that it did not give that "mode of mind, that management of the mind" which enabled a man to think or speak with understanding about matters of natural science. But he was careful to explain that he was not attacking the classics at all, but only putting in a plea for other kinds of knowledge as equally necessary ingredients in a good education. In other words, he had in view what one may call a formula of the constituents of necessary culture. Enumerating some branches of science as "fundamental, like the ABC of the alphabet," he let fall an expression which puts the idea in a striking form. All these, he said, are "things that a gentleman cannot do without."* That is to say, he had before his mind a more or less clear conception of the range of knowledge which a well-educated man ought to possess, and the foundation of which ought to be laid at school instead of being left to the chapter of accidents in later life.

This is the point to which German statesmen and educational authorities have given far more attention than has been the case in our own country. They have attempted to find a formula for the range of attainment which an educated man should be expected to possess. From point to point their ideas have broadened. They have been led to admit that, in certain respects, the formula will vary under the different conditions imposed by the demands of different kinds of professional and industrial life. But they have never departed from the fundamental idea that certain kinds of knowledge must be possessed by all educated men in common, and that to lay the foundation of such knowledge deep, and firm, and true, is the function of the secondary school. To this they have applied their energy for three generations. They have spared no effort

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and educated men can do what illiterate cannot; and the man who has learned to think and to reason, and to compare and to discriminate and to analyse, who has refined his taste, and formed his judgment and sharpened his mental vision, will not, indeed, at once be a lawyer, or a pleader, or an orator, or a statesman, or a physician, or a good landlord, or a man of business, or a soldier, or an engineer, or a chemist, or a geologist, or an antiquarian; but he will be placed in that state of intellect in which he can take up any one of the sciences or callings I have referred to, or any other for which he has a taste or special talent, with an ease, a grace, a versatility, and a success to which another is a stranger. In this sense, then, . . . mental culture is emphatically *useful*."

The foremost advocates of higher technical instruction in Germany insist on a basis of wide general education as an indispensable preliminary to success in applied studies. Thus, Dr. Redtenbacher, the Director of the famous Technical High School, at Karlsruhe, said that if we sacrifice humane studies in favour of a narrow form of technical training, we shall isolate the ranks of scientific industry from the rest of national life and estrange them from the more ideal interests of society. In his work on Universities and Technical High Schools (1891), Dr. Zöller declares that strenuous efforts to maintain a high level of general education are indispensably necessary, in order to enable the higher technical schools to accomplish their aim. (See Paulsen. Geschichte des gelehrten Unterrichts iv., 569.) A similar view is taken by the most experienced teachers in higher Technical Institutes in this country.

* Report of Public Schools Commission, 1864, vol. iv., Pt. 2, Q. 48, 55-58.

in defining their aims and in carrying them out in practice. The matter has never been allowed to end in mere talk. They have from the first been convinced that it is essential to the national welfare to fix a high standard of secondary education, to insist on that standard being maintained in practice, and to secure for boys of promise all over Germany access to the education thus defined. It is here that they find the differentia between primary and secondary schools. Each type of school has its aim. It is, in their judgment, just as necessary that the complete primary course should result in each scholar possessing a certain range of knowledge as that the complete secondary course should attain a corresponding end. Hence they insist on all children who are not destined for higher education remaining in the primary school from six to fourteen, in order that they may work through the whole course carefully planned out for those years. But they admit that by fourteen no boy can acquire the range of knowledge which is covered by the formula of a good general education. The latter involves a longer course, each year of which (beyond the initial stages) has to accomplish a certain part of the task assigned to the whole. Not that the masters merely teach an instalment of the complete course in one year, test its acquisition by an examination, and then leave the boy free to forget a large part of it. On the contrary, the attainment gained in each year is worked up afresh into the tasks of each succeeding year, until at the close of the whole course the boy is assured, so far as skilled teaching and constant discipline can assure anything, of that basis of knowledge which "an educated man cannot do without." The secondary school course, therefore, is not a casual length of chain from which one or more links can be cut off without affecting the usefulness of what is left. The course is an integral whole, requiring a specified number of years for its accomplishment, and rewards and recognition are given only to those who complete it. True, there are different kinds of secondary school-courses, different alike in period and in curriculum. But those differences, important as they are, are matters of sub-classification. Thus, the Germans admit a broad distinction between the courses planned to cover the years from nine to sixteen, and from nine to nineteen respectively, as they do between the courses which are fully classical, semi-classical, or wholly modern, as the case may be. But these distinctions do not touch the fundamental principle that, before a man can be called "educated" at all, a certain minimum of culture he must have, and that minimum, they hold, cannot be reached in a secondary school-course which ends before the age of sixteen. And it is this adherence to clearly-stated principle that has enabled the German people to build up its wonderful system of higher education. Granted that, at every point of the analysis, it may be arguable to admit qualification or criticism; granted that any line clearly drawn makes some hard cases; granted that the needs of modern life, the aptitudes of different boys, and the rapidity or slowness of individual development, shade off by almost imperceptible degrees the one into the other, and, there-

fore, make rigid classification difficult, or in some respects actually injurious; nevertheless, it must be admitted that the broad outcome of this systematic organisation has been on the intellectual side remarkable, and that it has succeeded in equipping a large proportion of the German nation with the kind of aptitude and the sort of knowledge which are becoming, year by year, of greater value in the struggle of modern life. The Germans believe that, under modern conditions, the victory will lie, not with an unorganised multitude, however conspicuous the energy and courage of some of the individuals composing it, but with a highly trained phalanx of workers, drilled to co-operate, and combining different forms of knowledge all subordinated to a common aim.

But many German thinkers would be among the first to admit that such a system as this has its dangers as well as its advantages. The phalanx itself proved unwieldy in later days; once broken, it could not easily be reformed. Persistent subordination tends to weaken individual initiative, on which in certain contingencies all depend. But to such criticisms as these an upholder of the modern German system would probably reply that, however necessary may become a more open order of attack, the latter in its turn will depend for success on each individual having a very high level of knowledge, and that the possession of that amount of necessary knowledge can only be made universal throughout that part of the nation concerned, by some such preliminary process of collective discipline as is secured by a State system of secondary schools. "I grant," he might say, "that such a system has perils of its own; that it "may tend to efface certain individualities of aptitude and "attainment which for some reasons it is highly desirable to "preserve; and that it may in turn be superseded by some looser "form of classification and arrangement. But, in order to "secure the advantages of the latter at its best, you must go "through the preparatory stage of stricter discipline, in order "that the meaning and the necessity of a high average of "individual attainment may, so to speak, be burnt into the mind "of the nation, and become instinctive and inevitable. Or, "otherwise, there will be a dangerously large minority, possibly "a majority, of persons who will disregard the duty of acquiring "that minimum of general culture which it is essential that each "unit, however independently he may be allowed to act, must "possess, if only that he may realise the points at which skilful "combination and subordination will always continue to be "necessary. And the presence of a large number of defaulters "of this kind will imperil not their own welfare only but that of "the community to which they belong. If you take a very long "view, the present system may be only a stage in the develop-"ment: yet it is for us a necessary stage, in order to guarantee "successful development at all."

But in attempting to fix a formula for what shall be regarded as the normal outcome of a good secondary education, there are two special dangers. We may decide on the wrong ingredients, or we may put in too many of them. The first mistake ends in the

production of the wrong kind of men for the work which has to be done. The second mistake produces premature fatigue of the intellectual powers, or (if actual over-pressure is avoided) a certain lack of focus in the mind. It is admitted by many German writers that, in the history of higher education in their own country during the present century, the reality of these dangers has been observed. To remedying such evils where they have been ascertained to exist, and to guarding against them at points where they have been thought likely to arise, the best intelligence has been steadily applied. Even so, however, there are some who believe that the evils have not been eradicated. Yet the severest critics would not go so far as to regret the existence of the system which, through defective application at some points, may have produced such evils. They would maintain that the system, with all its drawbacks, has been historically justifiable, and that, however sweeping the changes which may be ultimately necessary, the period of systematic classification will be found to have been indispensable as an intermediate stage.

Note.—The following extract from a speech made about two years ago by Prince Bismarck to the Prussian schoolmasters indicates his opinion of the influence of the secondary schools on German life:—

"The success attained by every land in its national development depends chiefly on the educated minority which the country contains. As I recently remarked, ill-temper among the dependent masses may call forth an acute illness for which we have remedies, but among the educated minority it results in a chronic disease, the diagnosis of which is difficult and its cure wearisome. Therefore I lay the greatest weight on the education and the sentiments of the educated classes in every country. To this category belong in Germany, among others, the Parliamentary leaders and the officers. The latter class would not be possible without our educational system. The corps of officers, including the non-commissioned officers, is an inimitable creation. Other countries cannot equal us in this, which is the product of the education in the higher schools. Another effect of this education is to be found in the perfection of our industry."—*Times* report.

The bearing of other than purely scholastic forces on some of the questions discussed in the foregoing section is treated of in the following letter which appeared in the *Times* for June 6, 1898:—

GERMANY'S COMMERCIAL PROSPERITY.

Sir,—Being engaged by a firm which is doing quite an important business in exporting machinery to England, I have been several times asked by Englishmen why it is that other countries, and especially Germany, have made such great industrial and commercial strides forward in the last few years, while in England industry and commerce have remained almost stationary. As this circumstance is attributed in England principally to the better commercial and industrial education which young men are receiving in Germany, perhaps it may be interesting for your readers to hear also the candid opinion of a foreigner.

Doubtless this fact is greatly due to the better education in Germany; yet, strange to say, although the superiority of the German educational institutions is pretty generally recognised in England, it is astonishing how very few Englishmen are going to Germany for purposes of study, while there are to be found in all high schools in Germany quite a considerable number of Russians, Americans, Japanese, and even Frenchmen. If, therefore, this comparatively greater advance of Germany were due only to better education, then this could be easily remedied if the younger generation of Englishmen—especially those whose means will permit it—would complete their studies in German high schools.

According to my private view the fundamental reasons for Germany's great advances lie deeper; I attribute them to the circumstance that the English nation, being a very conservative nation, has adhered a little too long to some antiquated institutions which in other countries have been replaced by more modern ones. Such improved institutions are:—

The metrical system of weights and measures,
The decimal standard of money, and
Compulsory service in the defence of the country.

The metrical system of weights and measures has at last been introduced in England, and, although it is not yet generally used, the public at large will soon find out the really great advantage of this system if it becomes better acquainted with the same.

To me, as a foreigner, it is absolutely incomprehensible why England adheres so long to the really very awkward standard of money and does not introduce a decimal standard, so much the more, as this could be easily done by simply dividing the shilling into 100 cents instead of into 12 pence, while pounds and shillings would retain their unchanged value. Even Englishmen have difficulties in reckoning foreign values in English money, and *vice versâ*, if they have not a special table at hand, while for every foreigner it is a real torture to be obliged to calculate in English money. I myself would often prefer to buy English goods, as I know that their quality is in many cases superior; but turning English money and English measures into foreign values and metric measures in order to compare prices makes too much trouble, and takes too much time, and so I abstain from doing so. I know personally hundreds of merchants who are acting likewise, and I am quite sure that if this difficulty did not exist English exporters would do much more business.

Every Englishman—whatever objections he may have against compulsory military service—will agree that it is the most democratic and just institution, as in the defence of the home it abolishes the difference between rich and poor, high and low. It is often remarked by Englishmen that a compulsory service is contrary to the individual liberty, but I think that it is just as much an encroachment on the liberty of the individual citizen to force him to pay his taxes and duties as to oblige him to take an active part in the defence of his home.

Germany's great advances are mainly due to compulsory military service. By this institution the whole mass of the people has been raised to a higher standard; the young man who under other circumstances would never have a chance of mixing with other classes of people, but would always remain in his own sphere as farmer or labourer, is, in this way, brought into direct contact with other classes, and placed under entirely new circumstances, any want in his ordinary education is supplemented, and, besides, he is taught order and discipline. But as education, order, and discipline are the foundations for the attainment of success in every economic field, there can be no doubt that, if these fundamental qualities are implanted in the whole new generation of a nation, this nation must in course of time surpass all other nations which do not offer to their younger generation the same opportunities for acquiring these qualities.

There is another very important point connected with compulsory military service, which—from the educational point of view—is of very great importance. This is the institution of the "Einjährig Freiwilligen." In Germany every young man has to do active military service for three years, excepting only those who have gone through one of the higher schools, such as a Gymnasium, a Realschule, &c. Such young men as the latter have to serve only for one year as "Freiwilliger," and if after the expiration of their year they are passing the examination they become "Lieutenant in der Reserve."

It is only natural that all parents would prefer to have their son serving as a lieutenant in case of war instead of as a common soldier, and the consequence is that all parents who can afford to do so, and even many who have to expose themselves to privations in order to be able to do so, are sending their sons to the higher schools so that they may be entitled to serve as "Freiwilliger" and become "Lieutenants in der Reserve." The consequence is that many thousands of young men, who, if this institution did not exist, would be sent by their parents to the workshop to earn money, are attending these higher schools.

Now, if a young man has finished these higher schools and become a lieutenant in the reserve, then, of course, he is entitled by his education to a much better position in life; and, besides, it takes only four or five years' studying at the University or at the Polytechnicum to become a graduate of these highest educational institutions. If it is taken into consideration that annually thousands of young men are graduating in these highest schools of Germany where there are hundreds in England, and if it is further considered how great an importance a thorough education is in every kind of economic competition, then it is not to be wondered at that Germany has made, in regard to industry and commerce, such great strides forward since the introduction of the uniform decimal standard of money, the metric system of weights and measures, and last, but not least, the introduction of the compulsory military service.

Budapest.

WM. VON BRENNERBERG.

XII.—Historical Sketch of the Curricula in Prussian Secondary Schools.

It is in this kind of perspective, therefore, that we may best regard the criticisms, trenchant as they are, which German writers have applied to the policy of securing by State supervision and control a high level of individual attainment among those receiving secondary education.

First, as to the ingredients of the intellectual outcome of a course of study in a Secondary School. On this point we can trace, throughout the history of higher education in Germany during the present century (and the present state of things can only be understood in the light of its historical development) a gradual change, or rather expansion, in the point of view. A hundred years ago the old-fashioned Latin school was the sole type of local Secondary School in Germany.* There were some boarding schools of high repute—such as Schulpforta, Meissen, Grimma, and their like—schools which traced back their history to the 16th century. These schools were very stern in their conception of discipline, and embodied in their somewhat narrow but consistently classical curriculum the ideas of Melancthon and of Sturm, overlaid by the accretions of later practice. Stagnant in the 17th century in consequence of the distractions and exhaustion produced by the Thirty Years' War, these celebrated schools gained new life through the reforms of 1728. In the 18th century they were the nursery of famous men. J. H. Schlegel and Lessing were educated at Meissen; Klopstock, Ernesti, the brothers J. E. and J. A. Schlegel, and J. G. Fichte at Schulpforta. Lessing used to recall with gratitude his school days at Meissen. "Theophrastus, Plautus, and Terence were my world, in which I studied at my ease in the narrow precinct of that secluded school world. How gladly would I have recalled those years again, the only years in which I was truly happy." Each of these schools had its own traditional influence, its ἦθος, as the Tractarians would have called it. An old Wykehamist might recognise in the description of these schools something which would remind him of the influence of his own. They possessed a strong literary tradition; their pupils set their mark on German literature. A recent writer thus describes the character of these famous Fürstenschulen. "Their scholars, sequestered from the agitations of the world, acquired at any rate the habit of independent work, learnt the methods and meaning of research, and gathered out of classical literature a store of knowledge and of æsthetic and moral ideas which laid a foundation for their after life. By the study of the antique world, they strengthened their character for the duties which awaited them in later years; they gained a true sense of style and served their apprenticeship to the art of letters."† Here,

* Paulsen. *Geschichte des gelehrten Unterrichts*, iv., 539.

† Dr. O. Heine; s. V. Fürstenschulen in Prof. Rein's *Encyklopädisches Handbuch der Pädagogik.*

more than at any other point in the history of German education, we catch the note of the best tradition of our own ancient secondary schools, and of those which have been modelled upon their practice. But the German Fürstenschulen did not produce these effects on all their scholars. Clever boys to whom literary studies were congenial derived true culture from their discipline; but the ruck of the scholars, the idle and the mediocre, drifted through the schools, insensible to their higher aims. And, in spite of the changes made in their curriculum by the reforms of 1769, the drift of public opinion set in steadily against these old foundations. There was a reaction against the predominant influence of the classical curriculum. Fierce diatribes against the unnatural life of boarding schools, against the spiritual deadness of their religious teaching, against "fagging," and the roughness of their diet and accommodation, undermined their popularity and prestige, and at the commencement of the present century their numbers had materially declined. Hence, at the critical moment when secondary education in Prussia was reorganised by Wilhelm von Humboldt and his colleagues (1808-1818), the bias of the time was against the old boarding school tradition. Their virtues were forgotten, and it was their faults that loomed largest in the eyes of those responsible for the new policy. Moreover, Pestalozzi had impressed upon Europe the essential rightness of a close connection between home and school. Thinking almost exclusively of elementary education, he had eloquently dwelt on the fact that the best hope of popular education lay in a very close and sympathetic relation between parents and teachers, between the training of the school and the influence of the home. But his writings and example affected education far beyond its elementary grades. The German nation had always cherished a high ideal of home life, and the system of taking a boy away from his home in his tender years and bringing him up under the dominant influence of a separate and distant community seemed alien to the national tradition. Furthermore, von Humboldt and his co-workers aimed at diffusing a high standard of secondary education throughout the whole of the middle class. Good schools must therefore be placed in every little town. Boarding schools might have met the needs of the rich, or of those poor enough to solicit the aid of charitable foundations. But for the great mass of professional and middle class families good secondary day schools were regarded as the essential thing. And all the tendencies of the time drew men in the same direction. Travelling was costly and difficult. Boarding school life meant the long separation of children from parental influence and from the atmosphere of home. Even letters could only pass at infrequent intervals; and the boarding schools had become unpopular. They had failed with the average boy. They represented a stiff old tradition: resistance, it may be said, was the badge of all their tribe. And thus, at the determinative moment, the new system of Prussian secondary education was worked out in the terms of the day school. Higher education was made local, instead of non-local.

And, at this parting of the ways, German policy in regard to secondary schools definitely took the path which led further and further away from what we know as the typical English tradition. In Germany, it was the reformed day school that became the principal influence in secondary education; the boarding school fell into a subordinate place. In England, things were otherwise. At the beginning of the century we had no such crisis in secondary education as Prussia had between 1808 and 1818. There had, it is true, been bitter feeling enough against the old boarding schools (many sharing Cowper's wish that such schools were "or better managed or encouraged less"), but it never produced far-reaching changes in our educational system.* Our old public schools tided over the danger which secretly threatened them. Nothing occurred to compel revolutionary change. Public opinion became absorbed in other than educational issues. The middle class, which was most concerned in the question, found its energies taken up in the rapid extension of its commercial activities. Religious divisions (partly social, partly traditional, partly due to profound differences in intellectual outlook), rendered futile any hope of establishing in small towns public secondary schools which would be acceptable to all alike. The State had no direct control over the Universities and no power of regulating their requirements for matriculation. The University question itself was bound up with the problem whether Nonconformists should be allowed to study at Oxford or take degrees at Cambridge, or be given access to a new university without any religious tests. Our professions were self-governing, and we had no compulsory military service. Thus the conditions were wholly different, and the course of development diverse also. When the movement of reform touched English public secondary education, it roused the boarding schools first. Butler at Shrewsbury, Hawtrey at Eton, Arnold at Rugby, were the leaders. They it was who raised the ideal of English secondary education, and their work established the old tradition of our higher schools on a new and surer foundation. Good work was being done in many of the local grammar schools before their time or since. But in England the quickening impulse of reform

* The following extract from the Letters of *Hannah More to Zachary Macaulay, Esq.* (London, 1860), illustrates the feeling on the subject of great secondary boarding schools, which prevailed in certain circles in this country at the time when the day school system was being so greatly strengthened in Prussian secondary education.

"In the year 1812, it became a serious question with Lord Macaulay's father whether it would be advisable or otherwise to send him to a public school. . . There was some idea, as it appears, of placing him at Westminster. Mr. Macaulay consulted Hannah More. The following is part of her answer:—'Barley Wood, August 7th, 1812. (She recommends Westminster 'by day.') . . . Throwing boys headlong into those great public schools always puts me in mind of the practice of those Scythian mothers, who threw their new-born infants into the river: the greater part perished; but the few who possessed great natural strength, and who were worth saving, came out with additional vigour from the experiment. . . Next to religion, there is no such drill to the mind, no such tamer, as the hard study and discipline of these schools. In all other respects, I think sufficiently ill of them."

(Cp. also Sir G. O. Trevelyan's Life and Letters of Lord Macaulay, chapter i., p. 27.)

came in the main from the boarding schools; and the kinds of discipline and tradition which are most easily established and maintained in boarding schools became, so to speak, the pattern for other schools. This has affected the history of English secondary education, as contrasted with that of German, throughout the last sixty years, and explains the characteristic excellence and defects of each side alike.

When, therefore, in 1808, Wilhelm von Humboldt began to remodel Prussian secondary education, it was to the local Latin schools (or grammar schools as we should call them), that he turned his hand. He found them attempting to fulfil a double function—that of educating boys who were destined to go on to the University and subsequently to enter a profession, and those who were intended for commercial life. In the lower classes of the schools these two grades of scholars were intermixed. The highest classes, often very small, were for the most part attended only by those who were preparing for the University. It was a survival of old days. Neither class of pupils got exactly what they wanted. There was neither the staff nor the intellectual standard necessary to the highest kind of secondary education. On the other hand, the future shopkeeper did not get an opportunity of learning the things appropriate to his future calling; he had, on the contrary, to learn a good many things which were wholly foreign to it. All alike learnt the elements of Latin, often taught in a dreary and mechanical fashion. But the boy, destined for the University and a profession, was kept back by the slow progress of his comrades, while they, on their part, found no opportunity of acquiring a more congenial (and, to them, more useful) kind of knowledge. Hence there was friction everywhere, and discontent on both sides. But, owing to the scarcity of the boarding schools, the number of the pupils needing more advanced instruction in day schools was often considerable. Therefore, the schools could not gradually accommodate themselves to the needs of the trading class. They had always to contend with two disparate elements, neither of which could gain elsewhere easy access to what it wanted.

The reforms of 1808-1818 settled the question in a very definite way. They converted the local grammar schools into classical schools of the most approved type.* As a single school could not fully meet the needs of both grades of pupils, those of the latter who were destined for commercial life had to go to the wall. The grammar school became, not (to use a later term) the modern Realschule, but the classical Gymnasium. That such a decision was possible at all shows clearly the relative influence of the professional and the trading classes at that time in Prussian society. Or, rather, it shows that Prussian statesmen regarded the higher education of the professional classes as then being the more urgent of two national needs.

* Herbart was no friend to the idea of a uniform curriculum of that kind. He wanted variety of type. Cp. his Allgemeine Pädagogik (1806) ii., 5, 4. "Ich gestehe keine reine Freude zu empfinden wenn Staaten sich der Erziehungsangelegenheiten auf eine Weise annehmen, etc." The whole passage is significant

The scheme of studies laid down for the new local classical schools was embodied in Süvern's Lehrplan of 1812.* It provided a ten years' course, divided into six classes. In the three lowest classes a boy was to spend a year a-piece; in each of the next two classes, two years; in the highest class, three years. The curriculum was as follows:—

	Name of Class.					
	VI. (One year).	V. (One year).	IV. (One year).	III. (Two years)	II. (Two years)	I. (Three years).
Latin	6	6	8	8	8	8
Greek	—	—	5	5	7	7
Mother Tongue	6	6	4	4	4	4
Mathematics	6	6	6	6	6	6
National Science	2	2	2	2	2	2
History and Geography.	3	3	3	3	3	3
Religious Instruction.	2	2	2	2	2	2
Hebrew (optional)	—	—	—	—	(2)	(2)
Drawing	3	3	2	2	—	—
Writing	4	4	—	—	—	—
Total number of lessons per week	32	32	32	32	32	32

Singing and Physical Exercise extra.
Half holidays on Wednesday and Saturday.

This curriculum shows what the reformers of Prussian secondary education regarded as the essentials of culture to be imparted by the higher schools. It was definitely classical, making both Latin and Greek compulsory subjects. But it also laid great stress on mathematics and the mother-tongue. The other subjects were all subsidiary to these four. Organic unity of curriculum was the aim; the subjects of instruction were not casually thrown in together without regard to the balance of the whole. On the ground that all the subjects named were indispensable parts of a good general education, no scholar was allowed to withdraw himself arbitrarily from any one of the divisions of the curriculum. All had to do all. This was the root idea of the plan. It excited much opposition. Some parents wished their boys to specialise; some teachers desired to give free play to the special bent of some of their pupils by relieving them from some of the other branches of instruction. But the Government held firm, and withstood all attempts to break into the unity of the curriculum. Nothing was permitted to impair the general formula of a good education, as conceived by the educational authorities of the day. And, in spite of manifold changes and extensions of view, this has remained the fundamental principle of German secondary education ever since.

There were three chief reasons why Wilhelm von Humboldt and his colleagues laid such stress on the idea of "allgemeine Bildung," *i.e.*, on a normal type of general education. First, they resolved to put an end to the one-sidedness of much of the earlier

* See Paulsen's *Geschichte des gelehrten Unterrichts*, iv., 289.

training, and, on the other hand, to insist on thoroughness of work in all subjects. Fr. August Wolf, in a communication to Von Humboldt, summed up the evils of superficial secondary education by quoting the line—

πόλλ' ἠπίστατο ἔργα, κακῶς δ' ἠπίστατο πάντα.
"Many things he knew, and badly knew them all."

They were resolved upon thoroughness and concentration, *non multa sed multum*. Secondly, a change was coming over psychology which profoundly affected the educational aims of the time. The faculty-psychology, which had regarded each kind of mental activity as based on some particular power of the soul, was giving way to a new conception of organic growth. Mathematical analogies were being superseded by the biological. Hence, educational reformers began to dwell on the possibility of a many-sided course of instruction, the parts of which should be so balanced and interconnected as to correspond to the many-sided activities of the single mind, and, while neglecting none of them, train all alike in subordination to the will. This conception showed itself in the idea of a curriculum so designed as to furnish a complete and well-balanced training for the mind. And, from this point of view, the selection of the right subjects of instruction was all-important, because the aim of instruction was "so to form the circle of thought that the right volitions would spring from it."* Thirdly, and most important of all, the Prussian statesman of the first decade of this century decided, above all, that the schools should train up men of a noble independence of character. This was their inspiring purpose and the animating principle of all their work. Their native land had suffered humiliation: to retrieve its fortunes there must arise all over Prussia a young and vigorous generation, with intellectual powers finely trained and fully developed. To produce a succession of generations like that was to be the aim of the higher schools. And where in history was the ideal of national character to be found? "Not in the old Roman world, with its tendency towards material dominion and power . . .; not in the world of mediæval Christianity with its tendency to repress human nature; not in the modern world, with its tendency to the mechanic arts and material utility";† but in the history and literature of Hellas. It was Greece alone that had secured the full and free and fair development of individual character. And, therefore, with the fervour of missionaries spreading a new religion, this group of men, who were statesmen and educational reformers at the same time, insisted on Greek taking an important place among the subjects prescribed for the curriculum of the higher schools. It was a young men's move-

* Cp. Prof. Rein's article on "Pestalozzi and Herbart." (Forum, May, 1896.) He quotes the following passage from Herbart, which illustrates the psychological views then beginning to make way in Germany. "Instruction aims primarily at forming the circle of the thoughts; education at forming the character. The latter is nothing without the former. . . One has education in one's power only on condition that one is able to bring into the youthful soul *a circle of thought, closely connected in all its parts.*"

† Cp. Paulsen's *Geschichte des gelehrten Unterrichts*, iv., 280.

ment* and marked by the enthusiasm of youth. Its leaders turned from the literary and philosophical tradition of France to that of Greece at its noblest time. Shelley's words in his preface to "Hellas" (1821) are inspired by the same feeling of devotion to the Greek ideal. "We are all Greeks. Our laws, our literature, our religion, our arts have their root in Greece. But for Greece—Rome the instructor, the conqueror or, the metropolis of our ancestors, would have spread no illumination with her arms, and we might still have been savages and idolaters; or, what is worse, might have arrived at such a stagnant and miserable state of social institution as China and Japan possess. The human form and the human mind attained to a perfection in Greece which has impressed its image on those faultless productions whose very fragments are the despair of modern art, and has propagated impulses which cannot cease, through a thousand channels of manifest or imperceptible operation, to ennoble and delight mankind until the extinction of the race." It was the aim of von Humboldt and his colleagues to bring into all the schools the "breadth, centrality, blitheness, repose," of which Mr. Pater speaks as the marks of Hellenic culture.† Much may be traced to the influence of Winckelmann (1717-1768). Just as, in Mr. Pater's words, Winckelmann had "defined in clearest outline the problem of culture-balance, unity with oneself, consummate Greek modelling," for Goethe himself, at the time when the latter, "possessing all modern interests, was ready to be lost in the perplexed currents of modern thought," so in like manner was it the purpose of the new Prussian Gymnasium, as its very name implied, to secure in the minds and character of the rising generation a deep, instinctive reverence for the ideals of Greek training and culture. And, under the impulse which Schiller and Goethe gave to German literature, it was natural enough that the classics, and especially the Greek classics, should take a leading place in the normal curriculum of the higher schools. But the preference for these Hellenic studies was based on something deeper than æsthetic grounds. It had a philosophical and propagandist side as well. Many of the leaders of the new movement hoped that they might replace the sanctions of revealed religion by the impulses of Greek culture. And in much that they wrote about their educational plans there is an echo of the sentiment half veiled in Schiller's lines—

"Da die Götter menschlicher noch waren,
Waren Menschen göttlicher."‡

* Paulsen, op. cit., iv., 312, footnote.

Cp. also the preface to *Endymion*, written in 1818, when Keats was 23. "I hope I have not in too late a day touched the beautiful mythology of Greece and dulled its brightness." When Keats was lent Chapman's translation of Homer (between 1812 and 1815) "he read it all night long, with intense delight, even shouting aloud when some especial passage struck his imagination." (Lord Houghton's memoir.)

† *Studies in the History of the Renaissance.* (Macmillan, 1873.) Essay on Winckelmann, p. 201.)

‡ *Die Götter Griechenlands.* But there were others who held firmly to the view that there was no real contradiction between (in the wider sense of each) the Greek and the Christian ideals. Cp. Dr. Baumgarten's article on Herder in Professor Rein's *Encyclopädisches Handbuch der Padagogik.*

In the history of education, it will be found that all great changes in school curricula have been conditioned by other changes, instinctive or avowed, in the point of view from which men look out upon the great problems of life and conduct. This was true of the momentous alterations which were made in the curricula of the Prussian higher schools at the critical period of their reorganisation in the early years of the present century. The underlying aim of the promoters of these changes was to give effect in the schools to what they conceived as being the necessarily new direction of human thought; to break into the old routine; to disturb the old tradition; to substitute for it something which they thought more living and actual, more closely adjusted to the facts. As Novalis said, *philosophiren ist dephlegmatisiren, vivificiren;* "the service of philosophy" (I quote Mr. Pater's paraphrase) "is to startle the human spirit into a sharp and eager observation." And with this aim the founders of the new system of secondary education in Prussia sought to vitalise the higher schools by the impact and the ferment of Greek philosophy and Greek ideals of balanced character. Had there been no such intellectual movement dominating the cultivated circles in Prussia at that time, there would have been no such searching reform of secondary education as actually took place. The intellectual effects of that reform have been felt ever since. The educated classes in Germany are more sensitive to the *collateral* consequences of new philosophical ideas than is the case with us. This contrast is no doubt partly due to inherited qualities of national temperament. But mental characteristics of this kind are strengthened by the operations of the higher schools; and thus the tendencies of education, though perhaps primarily the effect, become also in a measure the cause, of certain proclivities in the national character. And it is the apparent insensitiveness of the average educated Englishman to the wider bearings (on national policy and individual conduct), of such philosophical generalisations, say, as Darwin's, that produces in a certain type of German mind a profound irritation, as of wonder blended with contempt. "Es fehlt in England," writes Friedrich Nietzsche, "an eigentlicher Macht der Geistigkeit, an eigentlicher Tiefe des geistigen Blicks, kurz an Philosophie."* He means that, in his view, the English mind is lacking in the power of intellectual generalisation, in depth of real intellectual insight, in philosophical power. A student of the *instinctive* play of English thought on problems of conduct and belief, taking a larger view of the meaning of the word "philosophy," will not agree with this criticism, though, within certain limits, he will admit its force. But there can be little doubt that the methods of German higher education have given literary and philosophical generalisations an easier access to the average educated mind than have our English methods.

* Friedrich Nietzsche, *Jenseits von Gut und Böse. Vorspeil einer Philosophie der Zukunft.* (Sixth edition, Leipzig, Naumann, 1896. Section 252, p. 221, *seq.*) The whole passage here referred to is significant.

The English mind is at once less facile in philosophical analysis and less easily mastered by formulæ which it instinctively feels not to fit all the facts of the case. It pays for this by being less adept in philosophic expression and by living in an atmosphere less sensitive as a rule to the wider significance of new ideas. And the differences, possibly racial, in the intellectual life of the two countries are accentuated by differences in the influences and methods prevalent in the higher grades of their educational systems.

To return, the insistence on Greek culture as an essential element in all higher education was the distinctive note of the reform of the Prussian Secondary Schools in the early years of this century. Greek had, of course, been revived as part of the discipline of the highest culture ever since the Renaissance. But it had, with rare exceptions, been subordinated to the study of Latin. Latin was the common language of the educated world of Europe, and therefore as indispensable as has been for many generations French with diplomatists and as is to-day English with the modern commercial traveller. Out of this natural and necessary use of Latin in the schools sprang a further consequence: the experience and skill of teachers were gradually concentrated on so using it as to provide an early and stringent discipline for the mind, an exercise in accuracy, in logic, in habits of exact reasoning, and, as the use of Latin as a means of oral intercourse between educated men very slowly fell into desuetude, its value as a mental discipline became more prominent. But comparatively little stress was laid on the ideas and ideals of Roman civilisation and philosophy. The reformers of Prussian secondary education desired to find an intellectual ferment for the schools. It was, therefore, for the sake of its influence on character and on the outlook and bias of the pupils that they laid an altogether new emphasis on Greek in their curriculum. It was not their purpose merely to secure an addition to the actual knowledge of the pupils. Still less was their aim a pedantic one. They wanted to secure "wider horizons, an enlargement of the whole mental outlook." They believed, as Professor Butcher has put it, that "the application of a clear and fearless intellect to every domain of life was one of the services rendered by Greece to the world."* And therefore they chose Greek language and literature as the "yeast" of their new curriculum. Some, indeed, of the men of the time went out of their way to disparage Latin at the expense of Greek.† One eminent teacher declared that "his soul was possessed by the thought of so unveiling Greek antiquity as to inspire the German nation with ideas of patriotism and liberty." Herbart himself maintained that a classical education should begin with the reading of the Odyssey, but with him this view was based, not so much on any special enthusiasm for the intellectual effects of Greek culture, as on a belief that the stories

* *Some Aspects of the Greek Genius.* (Macmillan, 1891), p. 24.

† Cp. Passow's remarks, quoted by Paulsen. *Geschichte des gelehrten Unterrichts*, vol. iv., p. 236, seq.

in the Odyssey were specially appropriate to the early stages of intellectual development in the child. In Professor Paulsen's words, "the speculative phantasies of this movement for inspiring new national ideas by means of Hellenic culture were repugnant to his calm and sagacious temperament." Nevertheless, he held that boys should begin Greek before Latin, mastering, to start with, the barest elements of inflexion and then learning the language by reading selections from the classical authors, not by memorising rules of grammar.* Thus a subor-

* For Herbart's views on the priority of Greek to Latin, see W. Willman's edition of Herbart's works, Leipzig, Voss, vol. i., p. 76, 228, 291; vol. ii., 156, 464, *seq.* 473.) Joh. Schulze drew up a plan for the Gymnasium at Hanau, according to which Greek was to be begun before Latin. But the circumstances of the time prevented the plan from being carried out in practice. A passage in Vicesimus Knox's *Liberal Education* (1791) shows that "some innovators," as he calls them, in England, "wished that Greek might be taught before Latin." Knox was master of Tunbridge school, and opposed the innovating scheme on practical grounds. But he admits that Greek may sometimes be taught before Latin "in private tuition," a concession which is interesting when it is remembered that Herbart's own views on the subject were largely formed during his years of work as private tutor to the sons of a wealthy citizen of Bern, 1797-1800. The view that boys should learn Greek before Latin has many advocates at the present time. But the prevailing opinion lays stress on Hellenic studies as an element in the later, rather than in the earlier stages of a liberal education. The special form of enthusiasm which prevailed in Prussia at the beginning of the century has, of course, long since evaporated. But the position of Greek in the scheme of a liberal curriculum has probably never been stronger than it is to-day. New discoveries in archæology, and the development of historical and literary studies have enhanced its educational value. The case for Greek was admirably stated in a leading article in the *Times* of November 23rd, 1897. "There has, of course, never been any question as to the value of Greek studies as an instrument of liberal education. As a key to the noblest thoughts that have moved mankind, the influence of which is still felt in every department of mental activity, while their power and beauty must of necessity evaporate in the best of translations, Greek could never be at a discount. . . The true significance of Greek culture becomes more clear and striking with the progress of the human mind. . . The questions most pressing in regard to higher education now seems to be, not whether Greek shall continue to be taught, but how it shall be taught, and to whom, *i.e.*, to what extent it shall continue to be a mere vehicle for grammatical drudgery or forced on unwilling students to whom it will never be useful or interesting. There can be no doubt that much of the alleged failure of Greek as an educational instrument has been due to faulty and unintelligent teaching. Boys have been put to the Greek grammar before they were of an age to see in it any meaning or interest whatever, and the masterpieces of Greek literature have too often been used as a mere vehicle for parsing. . . The remedy is not in the abolition of Greek study, but in the improvement of its methods. Our public school and University teaching seems disposed to abandon that excessive devotion to grammatical analysis which killed all interest in the subject-matter of Greek authors, and to encourage wider reading with a view to the acquisition of vocabulary and intelligent understanding of what is read. Greek literature may hold its place in the very front rank of higher education if it is studied, not for the illustration of grammatical rules, but for the communication of thoughts worth reading and remembering, and beauties not of one age only, but of all time." A view, similar to this, is gaining ground in Germany, as will be seen below.

It may further be noted here that there was a very real connexion between the ardent advocacy of Hellenic studies in Prussia at the beginning of the century, and other currents of philosophic thought on the relation of the individual to the State. It was the chief aim of the patriotic statesmen of the time to make each citizen feel that he belonged not to himself alone, but to the State. ἅμα δὲ οὐκ χρὴ νομίζειν αὐτὸν αὑτοῦ τίνα εἶναι τῶν πολιτῶν, ἀλλὰ πάντας τῆς πόλεως, μόριον γὰρ ἕκαστος τῆς πολέως. (*Aristotle, Politics*, Ε (θ) 1, 1.337a). The true spiritual freedom of the individual was to be consciously realised in the act of voluntary subordination to the will of the community, of which he formed a part. The relation of this idea to the philosophical and literary movement of the time is discussed by Professor Herford, in his *Age of Wordsworth*. (Bell, 1897), pp. xxi.-xxii.

dinate tendency in the educational thought of the period reinforced the strong movement in favour of making the Greek language and literature the special mark of the reformed classical training.

The effect of the imposition of the new and wider curriculum on the Prussian Secondary Schools was at once to raise the standard of their education. But this was done at the cost of lengthening the normal school course, of consequently raising the age of entrance to the University, of curtailing the period devoted at the University to general education and strengthening the tendency to academic specialisation, and, finally, of increasing the range of subjects which a boy was required to master at school. Thus, at all points, the results of Prussian policy in secondary education have been to accentuate the difference between the German system and our own.

I have gone at this length into what at first sight may seem to be mainly an historical question, because it is really the key to a right understanding of the present position of secondary and higher education in Prussia. The account of later developments must necessarily be abridged within small compass.

When the reformed classical schools in Prussia had been at work for some years they incurred criticism from two distinct points of view. In the first place they were accused of impairing the intellectual activity of their scholars by what Alexander von Humboldt called "geistige Uberfütterung," or mental overfeeding. The result was that the new curriculum of 1837, while leaving the sum of working hours practically untouched, concentrated more time on Latin, at the cost of Greek and of Mathematics and the mother-tongue.* The semi-political, semi-religious enthusiasm for Greek had already spent much of its force, and, as always, changes in the temperature of the world of ideas affected the curriculum of the higher schools. The second, and not less formidable, line of attack came from those who held that there was need for a second and wholly different type of higher school than the classical, in order to provide a fitting education for boys destined, not for university studies, but for commercial and industrial life. The reform of the local grammar schools had rendered them less than ever appropriate to the needs of those pupils whose future careers would be not professional or academic, but on a somewhat lower social plane. Herbart himself had insisted from the first that höhere Bürgerschulen, what we might call citizens' higher schools, were a *sine qua non* in the complete educational equipment of a modern State. Every year strengthened this form of educational demand. Some people, especially in the industrial districts, advocated the establishment of "modern sides" in the local classical schools. It was contended that arrangements should thus be made to provide, with perhaps some form of common foundation, two different kinds of education under one roof. But the Prussian Education Department held its ground. In a circular of 1825, it set itself definitely

* The curriculum (Lehrplan) of 1837, is printed in Paulsen's *Geschichte des gelehrten Unterrichts*, vol. ii., p. 351.

against any mixture of the types of Secondary Schools. The justice of a demand for a "modern" education was admitted, but the supply of such education was held to be the affair of the municipalities themselves. The State could not do everything, and the essential matter of State concern was the maintenance of the highest form of secondary education (*i.e.*, as was held, the classical) in such profusion as to make it easy of access to all pupils desirous of availing themselves of it. To mix up classical and modern education would, in the opinion of the Prussian Education Department at that time, end in spoiling both. The two types were essentially different, had different aims, needed different curricula and teachers differently trained, were in short needed for different classes in the community. No single teacher could efficiently serve two masters—the cause of classical education and that of studies more immediately useful. Such a double service would impair his efficiency, injure the unity of his work, prevent him from devoting himself to either problem with the single-mindedness essential to complete success. If the municipalities felt the need for another type of secondary school, better suited to the needs of the trading and industrial classes, let them supply it. But the State, it was urged, must concentrate its efforts on securing the highest form of secondary education, which could rarely hope to be totally self-supporting, but was nevertheless of the first and most essential importance to the higher welfare of the community at large.

This decision marked another turning-point in the educational policy of Prussia. From that time forward it was a fixed principle that the different types of secondary school should as far as possible be kept distinct. In England the course of events has been otherwise, and the amalgamation of different types of curriculum under one headmaster has become a characteristic of our system of secondary education.

The demand for a "modern" as distinguished from a classical curriculum has had behind it some of the strongest forces of our time. In all directions industry and commerce have felt the impulse of new ideas; the field of their activity has rapidly widened, more of general knowledge has become necessary as a preparation for practical careers. In the application of science to industry there has been an ever-increasing demand for young men of ability, well-trained in studies which equip them for business callings instead of tending to estrange their sympathies from commercial life. And in the vast expansion of foreign trade, with all the new facilities offered to commercial enterprise by steam communication, the press and the telegraph, proficiency in the use of modern tongues has become an increasingly valuable part of the intellectual outfit of an aspirant to commercial success. And, behind all this, there has been the deeper instinct that the conditions of modern life call for a culture of their own; for knowledge of the course of the development of modern states and of modern industry, for closer acquaintance with the methods and conclusions of scientific inquiry; for the careful study, during the years of school-time, of modern literature, modern history, and modern ideas. Thus the trend towards a new form of

curriculum has not been utilitarian only, or solely based on commercial interests. Far more profoundly significant than the merely commercial aspect of the movement has been the slowly formed conception of a new kind of liberal education, which shall discard the dead routine of tradition and write itself afresh in modern studies, in an altered discipline, in revised ideals of life.

But this wider notion of "modern" education did not quickly disengage itself from narrower and more "Philistine" demands. The tradition of the Realschule inherited from the eighteenth century had led men to regard *specific* forms of preparation for different kinds of commercial and industrial life as inseparable from the curriculum of the citizens' higher schools. It was Spilleke who more than any other man made effective protest in Prussia against this tendency to identify premature technical specialisation with all schemes for providing a higher grade of education for the sons of the trading and lower middle class. In his essay published in 1822 he set on foot the propaganda for the Realschule as we know it to-day. Thus, just as the Prussian Education Department on the one hand prevented the classical schools from being mixed up with educational aims of another kind, so Spilleke on the other hand prevented the ideal of a "modern" liberal education from being mixed up with prematurely specialised instruction.

The new ideas slowly made their way. Over against the favourite curriculum of the fully classical school, teaching both Latin and Greek and preparing boys for the University and the higher professions, there gradually took shape the conception of two other kinds of school—the one using Latin as a linguistic discipline but teaching no Greek; the other seeking linguistic training in modern languages alone. These two types of "modern" education were for a time somewhat intermixed. In 1832 the "provisional regulation for the leaving examinations in the citizens' schools and Realschulen (Vorläufige Instruktion für die an den höheren Bürger- und Realschulen anzuordnenden Entlassungs-prüfungen) secured for such pupils in these schools as should pass the leaving examination the privilege (previously limited to the scholars from fully classical schools) of one year's military service and of admission to the postal service, forest service, and the profession of architect. Latin was expected but not actually required. If the candidate did not offer Latin, the fact was to be noted on his certificate. Thus, in the first stage, the Realgymnasium (semi-classical school) and the Realschule (non-classical school) were treated as two sub-varieties of one type of secondary school.*

With ups and downs, corresponding in part to changes in the political outlook,† the fortunes of the "modern" schools gradually improved. By some of the more old-fashioned classical teachers they were held up to derision and contempt. "They are schools which cram into boys what will 'pay,'" Nützlichkeitskramschulen); "Boys who leave a Gymnasium for

* Paulsen. *Geschichte des gelehrten Unterrichts*, vol. ii., p. 547, *seq.*
† Ibid. pp. 472-3, 551.

a Realschule are, with few exceptions, lads that no one can make much use of and of whom one thanks Heaven to be rid"—such are some of the recorded expressions of the time. But in 1859 "modern" secondary education was recognised by the Government in a more formal manner than before. The "modern" schools were divided into three classes:—

(1.) Realschulen of the first class (with a nine years' course including Latin).
(2.) Realschulen of the second class (with Latin optional).
(3.) Höhere Bürgerschulen (the same as (1) above, but with only a seven years' course).

So far, however, the universities were closed to the scholars from all these schools. In 1870 pupils who successfully completed the full course of nine years' work in Realschulen of the first class were given access to the study of mathematics, natural science, and modern languages at the University. This opened to them a number of professions to which they had had no previous access, including that of teaching certain subjects in secondary schools. In 1879 the lower technical schools (Gewerbeschulen) were transferred from the jurisdiction of the Ministry of Commerce to that of the Education Department, and re-named Realschulen without Latin. And at length in 1882 the new Lehrpläne re-classified the hierarchy of Prussian secondary schools as follows:—

1. Schools with a full course of nine years:
   (*a*) Gymasium (fully classical school).
   (*b*) Realgymnasium (with Latin but no Greek).
   (*c*) Oberrealschule (no Latin or Greek).
2. Schools with a course of six years:
   (*a*) Progymnasium (fully classical).
   (*b*) Realprogymnasium (Latin but no Greek).
   (*c*) Höhere Bürgerschule (no Latin or Greek).
3. Schools with a course of seven years.
   Realschule (no Latin or Greek).

The Education Department had thus definitely accepted the idea of non-classical training as a part of the national system of higher education, though the distribution of the privileges among the various types of school, even among those with the same length of course, remained (and remains) unequal.

In the meantime great changes had been made in the curriculum of the Gymnasium or fully classical school. After the alterations made in 1837 (referred to above) the next noteworthy revision took place in 1856. The aim of the changes was to lessen the pressure on the scholars, to bring back more freedom, unity and spontaneity into the work of this highest grade of Prussian secondary schools.* It seems doubtful whether these benefits were actually attained. "More freedom in theory, not in practice," is Professor Paulsen's comment. But in 1882, when

* Paulsen. *Geschichte des gelehrten Unterrichts*, vol. ii., pp. 511, seq.

the Realgymnasium (*i.e.*, the secondary school with Latin but no Greek) was first recognised *under that name* and given a special curriculum of its own, more drastic changes were made in the Lehrplan of the Gymnasium itself. Modern studies were given a larger place in the classical curriculum—a change which was taking place contemporaneously in the English secondary schools of the same type—and while the hours devoted weekly to Latin and Greek were reduced by 11, mathematics gained 2, natural science 4, history and geography 3, French 4.* The scheme of study stood as follows:—

GYMNASIUM. NUMBER OF WEEKLY LESSONS IN SCHOOL.

	NAME OF CLASS.								
	VI.	V.	IV.	Unter III.	Ober III.	Unter II.	Ober II.	Unter I.	Ober I.
Religious Instruction.	3	2	2	2	2	2	2	2	2
Mother Tongue -	3	2	2	2	2	2	2	3	3
Latin - - -	9	9	9	9	9	8	8	8	8
Greek - - -	—	—	—	7	7	7	7	6	6
French - - -	—	4	5	2	2	2	2	2	2
History and Geography.	3	3	4	3	3	3	3	3	3
Mathematics - -	4	4	4	3	3	4	4	4	4
Natural History -	2	2	2	2	2	—	—	—	—
Physics - - -	—	—	—	—	—	2	2	2	2
Writing - - -	2	2	—	—	—	—	—	—	—
Drawing - -	2	2	2	—	—	—	—	—	—
Total - -	28	30	30	30	30	30	30	30	30

On the other hand, the Realgymnasium, the Greek-less sister of the Gymnasium, differed from the Realschule of the first class out of which it had been developed, by the marked increase assigned to the hours of instruction in Latin. Its curriculum, as compared with that of the Realschulen of the first class, showed a reduction of 3 hours weekly in the time assigned to mathematics, of 4 hours under the head of natural science, and of smaller reductions in other non-classical subjects with an increase of no less than 10 hours weekly in Latin.

The changes of 1882, says Professor Paulsen, were of the nature of a compromise. Neither the advocates of the classical, nor those of the modern, education got what they wanted. The classical teachers had hoped for more freedom on the side of the humanities. They found themselves under the necessity of compelling their scholars to reach a higher level of attainment in a wider range of subjects, especially in mathematics, in French and in natural science. On the other hand, the teachers in the Realschulen had desired more freedom to model their curriculum according to the needs of their scholars. They obtained, in the Realgymnasien, a heavy burden of Latin, and, in the Oberreal-

* Paulsen. *Geschichte des gelehrten Unterrichts*, vol. ii., p. 576.

schulen, no freedom to teach Latin at all. The policy of fixed types of school had again prevailed, and this involved strict regulation as the price paid for high intellectual attainment in each of the types ordained.

There followed, naturally enough, a period of controversy and unrest. The Realgymnasien sent up to the Universities (for those studies, that is, which were open to scholars from this type of school) an increasing number of students. There were signs of an overcrowding of the professions. The demands of the industrial and commercial classes for a purely "modern" education became more insistent. The champions of the old classical education showed signs of entering into alliance with the advocates of the Latin-less schools in order to crush out the "dangerous compromise embodied in the Realgymnasium" which taught Latin but discarded Greek. Others urged the claims of a new scheme for the establishment of secondary schools teaching no classics in the sixth lowest (years') classes, and then forking out at that point into three parallel divisions, with (1) Latin and Greek, (2) Latin only, and (3) neither Latin or Greek respectively in their alternative curricula. Then came the famous Conference on Secondary Education, held in Berlin in December 1890, and described in an earlier part of this paper. And finally the Prussian Education Department issued the Curricula of 1891, a translation of which is printed in this volume. The schools, it will be observed, are classified according to their distinct and separate types. There is no confusion or intermixture. Each kind of school is intended to fulfil a certain end. Its aim, in each subject, is fixed for it in a definite manner. There is no uncertainty as to the standard which each shall reach at every stage of its work, in every branch of its work, and at the completion of its work. But the State recognises three alternative types of "general education" as obtainable in secondary schools. To all three types, however, it by no means accords equal privileges. The Gymnasium is still the more highly favoured of the three. It alone has the full range of privileges to offer. It still attracts the pick of the boys, though of course to any such generalisation there are many exceptions. It alone can admit its pupils to the study of Philosophy, of History, of Classical Philology, of Law, of Theology, of Economic Science, and of Medicine, at the University. That is to say every doctor and every jurist in Prussia has had to pass through the complete classical course of nine years at a Gymnasium. The possession of these privileges naturally maintains its high inherited prestige. It is the most highly favoured of the three types of complete secondary school. The Realgymnasium, on the other hand, has only two privileges to distinguish it from the Oberrealschule, viz., the right of admitting its pupils to the higher Military and Naval Service and to the study of Modern Languages at the University.*

* A summary of the privileges attaching to the various types of Secondary Schools in Prussia will be found in *Special Reports on Educational Subjects*, 1896-7 (pp. 432, *seq.*).

The following tables show the number of scholars in the different types of secondary schools in Prussia in the winter half-year 1895-6,* the last for which statistics are available:—

Type of School.	Number of Schools.	Number of Scholars in the schools.	Number of Scholars in the Preparatory Department.
(*a*) With nine years' course:			
Gymnasien	273	76,078	8,976
Realgymnasien	86	24,534	8,833
Oberrealschulen	24	10,288	1,725
(*b*) With six years' course:			
Progymnasien	45	4,544	266
Realprogymnasien	71	6,465	969
Realschulen	73	19,675	3,675
Total	572	141,584	19,494

Thus there were in Prussia 318 secondary schools with a curriculum including Greek and Latin; 157 secondary schools teaching Latin but no Greek; and 97 secondary schools teaching no classics at all. In the fully classical schools there were 80,622 pupils; in the semi-classical, 30,999; and in the non-classical, 29,963. The scholars in the preparatory departments are omitted from this comparison because it does not follow that they will proceed to the upper departments of the same school, *e.g.*, many boys go from the preparatory department of a Gymnasium or Realgymnasium, before beginning Latin, to a non-classical school.

These figures show that, though not unassailed, the numerical as well as the social primacy of the fully classical schools is still unshaken in Prussia. Tradition, social preference, professional habit are all in their favour, not to speak of actual privileges and the possible superiority of their curriculum. But in any comparison of the intellectual effects of different curricula, it is important in the first place to ascertain whether the actual material, on which the curricula operate, is strictly comparable in the different types of school concerned. Herr Alex. Wernicke, writing in the *Zeitschrift für lateinlose höhere Schulen* for February 12, 1897, stated that, as a matter of fact, the most gifted boys in Prussia (and not those of the upper classes only) are generally sent to the fully classical schools.† In so far as this statement is accurate, and as a general truth it seems undisputed, the Gymnasien start with the immense advantage of having the best class of boys to deal with. But it is possible that, in the course of time, they may lose this and other adventitious benefits.

* *Statistisches Jahrbuch der Höheren Schulen*, 1897-8. (Leipzig, Teubner), 2nd Abteilung, p. 1,038.

† P. 143. The writer explains, in a footnote, that he is aware that, in the case me non-classical schools, the conditions are more favourable.

XIII.—The Educational Effects of a Definite Classification of Secondary Schools according to their Curricula, and to the Length of their Normal Course.

For what it is worth, however—and for certain purposes it is worth a great deal—Prussia possesses the advantage of a clear-cut classification of the different types of secondary schools according to their aims and curricula. Some headmasters of English secondary schools lament the absence of any similar classification in this country. Thus, in an address delivered in January 1898, Dr. Gow, of Nottingham, urged the necessity of some form of "intellectual organisation of secondary schools by means of general curricula." He maintained that "it is desirable and necessary that the public at large should take an intelligent interest in secondary schools, which it will not do until the schools are arranged on some intelligible plan." The outline of such a plan he sketched as follows:—

"Let us suppose a National Council of Education to have been appointed and to have issued a series of curricula for schools of different types, for secondary schools which prepare for the Universities and the professions, for secondary schools which prepare for business, for technical schools, for higher grade schools, for elementary schools. I lay no stress on this list, but give it merely to illustrate the kind of work that I want the Council to do at their discretion. Suppose that, for secondary schools, with which alone I am concerned, the curricula should state what subjects should be taught, what time should be given to each, and what standard should be attained in each form or set. Suppose that each school were required to print, every term, a complete list of each form and set, with time-table and subjects of instruction. Suppose that local inspectors were appointed, whose business should be to visit the schools and, without interfering with the teaching, to certify that the work was really done and the standards really maintained. Consider what advantages would result from such a system to the public, the profession, and the pupils. Parents would, in a few years, understand the work of each school and the standards of each form, and would assist in keeping their children at least up to the average standard of their age; and again, parents who removed from one part of the country to another would have security that they would find somewhere near their new home a school differing only in unimportant particulars from that which they had lately left. Schoolmasters would be protected from ignorant and vexatious interference, but at the same time any indolence or incapacity or duplicity on their part could not long remain undetected. . . . The preliminary professional examinations could be abolished and without detriment to the professions, for it would be open to them to say, 'We will not take a boy except from a school of a certain type and from a certain standard in it.' The time saved from examinations could be given to learning, and the evil effects of examinations would not exist. Every teacher would teach his best, conscious that he was in rivalry with hundreds who were trying to do the same thing, and that his success could not be overlooked. Experiments could be publicly notified and the results recorded by competent judges; and teachers, when they met in council, would discuss the practice of their profession with the assurance that they really could get something done in time. Overlapping would be impossible, or would at least be open and undisguised. A local authority would be able to say what type of school was wanted in its locality and on what scale it should be supplied." *

* *Education*, February 12th, 1898.

Dr. Gow admits that any such classification of curricula would involve the establishment, in some form or other, of a central council for education. But he argues that, as in other branches of national defence, the education of the country should be regarded as a whole.

"The safety of the whole country depends upon the adequate protection of every part of it. Similarly, it is not sufficient that there should be good education here and there, for we have that already; there must be good education everywhere, else the nation is not sufficiently protected against its rivals. And this high general efficiency can only be secured by the supervision of a Central Council comparable in character and authority with the Admiralty and the War Office."

He further points out that "uniformity in curriculum" and "uniformity in methods of teaching" are quite different things. It is only the former that he advocates; the latter he strongly condemns, on the ground that "teaching is an art, even a fine art, calling for invention, intellect, taste, judgment in the highest degree," and that "it would be absurd to attempt to reduce this to a uniform mechanical process."

"But uniformity of curriculum is on a very different footing Consider the analogy of some other art. There was a long period in the history of painting when artists had practically no subject for pictures except the Virgin and Child; but, notwithstanding this uniformity of subject, the methods of painting and grouping, the coloration, the expression of devout feeling, all that is intellectual in the painter's art, was not uniform or mechanical, and a Virgin and Child by Botticelli bears hardly any resemblance to the same subject when treated by Raffaello. If you dispute this, I will try another analogy, the art of cricket. It was always possible, I suppose, to find some pleasure in knocking a ball about; but skill began to be developed only when rules were introduced, and now, when everybody plays cricket on a pitch of the same length, with a ball of the same weight, with a bat of the same width, and so on, skill and public interest are at their highest, and yet there is no uniformity of method. Grace does not bat like Ranjitsinhji, or Peel bowl like Richardson. The fact is that it is essential to the progress of every art that a great number of persons should be trying to do the same thing, each in his own way. The limitation of the subject-matter is an aid, and not an obstacle, both to the development of the artist and to the appreciation of the spectator. Similarly, the art of teaching will never be highly developed or highly appreciated by the public until a great number of persons are engaged in trying, each in his own way, to teach the same things—these things being so clearly defined that the public can become intelligent critics of the process. Do you doubt it? Then consider for a moment the immense improvement in teaching which has been occasioned by the institution of the Local Examinations, and ask yourselves how much of the improvement is due to uniformity of subject, uniformity of standard from year to year, the rivalry of teachers to secure the best results, and the publicity of the success."

He proceeds to point out that, under present conditions, English secondary education does not escape a certain uniformity, but that this uniformity is brought about, not in any clearly thought-out way, but by the haphazard, and often mischievous, influence of a variety of external examinations. For an inferior and often demoralising kind of uniformity, he would substitute a carefully planned and as carefully watched classification by a National Council representing the various grades of education.

"There is already a great deal of uniformity in the curricula of our schools. The Universities of Oxford and Cambridge examine every year nearly 30,000 children in examinations which offer nearly the same subjects and the same

standards to children of the same age. The London Matriculation attracts nearly 4,000 candidates. The College of Preceptors has a host more. It is obvious that schools which prepare for these examinations must have the same or nearly the same curricula, and that a very trifling adjustment would suffice to produce in several hundred schools, including all the largest, all the uniformity that any sane man could desire. It is customary, indeed, with opponents of authorised curricula to cite the story of the French Minister of Education, who took out his watch and observed with pride that every child in France was then engaged upon a lesson in geography; but this rigid uniformity is abandoned even in France, and need not be "named among Christians" any more. Not only is it not required, for intellectual organisation, that all children should do the same thing at the same time; it is not even required that they should do precisely the same thing at all. It is not necessary that they should all read the "Merchant of Venice," or "Cæsar, Book V.," or "La Jeune Sibérienne"; it is necessary only that they should all give the same amount of time to the same branch of study, and should, at about the same age, aim at the same standard of attainment. Well, I say that this result could be secured with very little adjustment of time-tables, and very little alteration of customary names.

I have myself frequently inquired into the later history of boys who left my school to go to other schools—for instance, Manchester and Rugby. I have always found that they go, in their new schools, into forms of the same denomination and continue the same work, often with the same books, and I feel confident that a committee could arrange a series of standards, ranging from the first form to the sixth, which would cause hardly any disturbance in most secondary schools.

Such uniformity as now exists is mainly the result of certain examinations. But the effect of public written examinations is very far from being wholly good, either to teacher or to pupil. The subject being necessarily narrow, the standard necessarily the same from year to year, the time given to each paper necessarily short, these examinations tend to produce uniformity of method as well as of subject. The teacher is apt to neglect *this* topic because it is never set, and to lay stress on *that* because it lends itself to a neat question; and thus, while the worst craftsmen are improved, the best are certainly degraded. The effect on the pupil is more serious. He sees his teacher content, or compelled, merely to outwit the examiner—the example before him is one of cunning or cynicism—he regards an examination as the end of knowledge; nothing is worth knowing which is not required for examinations. Everything worth knowing must be presentable in a neat paragraph, and when all examinations are passed, there is nothing more to learn. Thus the examination system does a great deal to bring about that intellectual atrophy of which the signs are so abundant at the present day. Now, if we had a statutory uniformity in schools, all the good effects of examinations would follow without the bad. The teacher, for instance, who is required to give two hours a week to English literature, would choose some book that he loves or that he wants to read carefully for himself, or that he knows he can teach really well. He would stand up to his class like a man to give freely of his learning, his experience, his judgment, his enthusiasm. It matters little if what he gives is not of the best; at least it is genuine, it is a bit of real life, and some other teacher will supply the corrective. That is the position that I wish to see the teacher occupy, and that he does not occupy under our present system.

With this address of Dr. Gow's, it is interesting to compare Mr. Matthew Arnold's argument for the establishment of a "High Council of Education." The passage occurs in the account of secondary education in foreign countries, prepared by him for the Schools Inquiry Commissioners in 1866, and printed in their report. (Vol. VI. pp. 630-1.)

"A High Council of Education, such as exists in France and Italy, comprising, without regard to politics, the personages most proper to be heard on questions of public education, a consultative body only, but whose opinion the Minister should be obliged to take on all important measures not purely

administrative, would be an invaluable aid to an English Education Minister. . . . One or two matters, on which I have already touched in the course of my report, are matters on which it would naturally be the function of such a Council to advise. It would be its function to advise on the propriety of subjecting children under a certain age to competitive examination, in order to determine their admission to public foundations. It would be its function to advise on the employment of the examination test for the public service; whether this security should, as at present, be relied on exclusively; or whether it should not be preceded by securities for the applicant having previously passed a certain time under training and teachers of a certain character, and stood certain examinations in connexion with that training. It would be its function to advise on the organisation of school and University examinations, and their adjustment to one another. It would be its function to advise on school books, *on the graduation of schools in proper stages, from the elementary to the highest school; and, above all, it would be its function to advise on studies and on the plan of work for schools; a business which, as I have said, is more and more inviting discussion and ripening for settlement.* We have excellent materials in England for such a Council. Properly composed, and properly representing the grave interests concerned in the questions it has to treat, it would not only have great weight with the Minister, but great weight, as an illustrious, unpaid, deliberative, and non-ministerial body, with the country, and would greatly strengthen the Minister's hand for important reforms." *

In Prussia, the functions of such a Council are discharged by the Vortragende Räte in the Education Department, assisted by the advice and the expert knowledge of local conditions possessed by the highly qualified inspectorate which is organised in Schul-Kollegien, one College or Board for each Province. It is difficult to exaggerate the influence which this form of organisation has had on the efficiency of Prussian secondary education. All the inspectors of the secondary schools have themselves had experience as teachers in such schools. They are intimately acquainted, not only with the internal condition of the schools in their respective provinces, with the quality of the teaching staff, and with the special needs and difficulties encountered in the different localities, but with the actual problems of secondary education as teachers, and teachers alone, can know them. They have had experience of actual class work; they know what the boys can undertake; where the shoe pinches; what is the real pressure of examinations and of school studies. At every point, therefore, the Central Educational Authority of Prussia is closely acquainted with the details, as well as with the general conditions, of the problems before it. It combines the best local experience with a wide general outlook. It takes a synoptic view of the whole question of public education. It watches the daily work of the schools, it takes cognisance of actual class teaching, it associates itself with the teachers in the conduct of the leaving examinations, it receives constant reports from the headmasters as to the condition of the schools, it examines the text-books proposed for use in the schools, and approves them when satisfactory, and it authorises the curricula for schools of varying types. But all this is done with the utmost consideration for differences of local need, and with precise and searching investigation into the

* Cp. the Report of the Royal Commission on Secondary Education, 1895, vol. 1. (Recommendations of the Commissioners), pp. 258-9, and pp. 104-110.

merits of any changes proposed. It may be said of it what Pericles said of the people of Athens, that, "it has a special power of thinking before it acts, and of acting too." The whole system is, as nearly as may be, a perfect combination of knowledge and machinery. Large responsibilities are thrown on the municipalities, because the aid rendered by the State to secondary education consists less in money grants than in guidance and advice. But for the whole Prussian system of education the Central Authority acts as the organising brain. It will be noted that the officials sitting in Berlin keep themselves in very close and intimate contact with the Provincial Boards of Inspectors, and the latter with the local authorities and teachers in the province. The result is a union of economy and intellectual efficiency probably unequalled elsewhere.

Human nature being what it is, some rigidity is inseparable from any highly organised system of supervision and control. What we in England call "red tape," and the Germans "the green table," may make its appearance from time to time, despite all efforts to the contrary. But all methods of government have the defects of their qualities, and the remarkable thing in Prussian secondary education is not its inelasticity, but its power of gradual and effective readjustment to new needs. This is rendered the more easy by the existence of a highly developed educational public opinion, and by the careful and systematic discussion of educational methods in the professional press, and, as we have seen, the Government summons from time to time what may almost be called, so far as Prussia is concerned, an Œcumenical Council of representative men, in order to review in a large spirit the wider problems of national education in their relations to the economic and intellectual welfare of the State.

There is doubtless something to be said, in theory, for absolute *laissez-faire* in matters of education, for the complete abstinence of local and central government in all its forms from any part of the task of providing or superintending the work of all grades of schools. Such a view has recently been maintained with the utmost logical consistency, by Mr. Benjamin R. Tucker, of New York.*

"The Anarchists," he states, "do not believe that education should be furnished to children by the State. We have no objection to philanthropic efforts in that direction—people voluntarily combining together for such a purpose—but we do object to public schools supported by compulsory taxation. . . . The people may always be trusted to find out the means to provide the instruction they desire. To be worth anything education must come as the supply responsive to demand. Private enterprise always furnishes anything for which there is a demand, provided the demand is a practicable one. The Anarchist believes that education does little or nothing in the direction of forming the morals of the people. It puts weapons in the hands of those who are criminally inclined, and instruments for good in the hands of those whose inclinations are good. Whoever is educated has power, and that power may be used for evil or for good.

* In the *Educational Review* (U.S.A.) for January, 1898: Professor Nicholas Murray Butler, the Editor of that *Review*, informs his readers that Mr. Tucker is the most prominent representative in the United States, of "the philosophical anarchists who aim to bring about a new order of society through education."

"As to what education a child should have, the answer is, the education that it wants. Anyone who feels the need of higher education has the opportunity to strive after it and find the means of getting it. Educational enterprise should be, like any other, a commercial enterprise. It offers what is wanted to those who want it at a competitive price; those who want a little education will buy a little; those who want much will buy much.

"There is no need of discipline to direct the mind of the child. Let the child follow its bent and learn what it wants to.

"I make the same criticism against the present educational system that I make against all Government institutions; they are all subject to the same incompetency, carelessness, over-drill, too much regimentation, too little spontaneity, too little recognition of individuality—everything run in the same mould.

"What is the duty of the parent toward the child? The position of the Anarchist is that there are no such things as rights and duties, except so far as they are a matter of contract; and as there can be no contract between a parent and an unborn child, and as a mere infant is incapable of making a contract, it is obvious that there can be no duty to an unborn child or an infant. Until they are able to assert themselves, until they are able to contract, they are the property of their creators (I mean, of course, their human creators), and such creators should have sole control of them, and neither the State nor anybody should be allowed to step in betewen the creator and his property. If the creator sees fit not to give his child an education that is his business. It is to be added, however, that the Anarchist holds that the motive of parental affection is all-sufficient to insure the care of children by their parents."

Whatever may be thought of this philosophy in the abstract, its practical application, in England at all events, would be attended with some difficulty. It would involve, in the first place, the abandonment of the whole system of Government and local grants for elementary education, as well as of the present arrangements for inspection and supervision. For, in the first place, the theory enunciated by Mr. Tucker applies to all grades of instruction; and, furthermore, elementary and secondary education are so interdependent that, if the first were aided by money grants and counsel by the Central Government or by local authorities, while the second was left destitute of any form of guidance or aid, the schools, originally established for the work of elementary education, would inevitably, and in response to imperative local and national needs, attempt to do something to provide education of a higher type for the children who would otherwise be deprived of any opportunity of obtaining the kind of instruction merited by their attainments and necessary to their success in life.

But a no less serious obstacle to the acceptance of Mr. Tucker's scheme is found in the existence of endowments left for the purpose of education. In England alone there are, available for secondary education, endowments known to be subject to the Endowed Schools Acts, 1869-74, producing about £650,000 a year.* The application of these endowments is under the supervision of the State, which has thus, apart from all other forms of aid and control, an inevitable relation to secondary education. Under the Charitable Trusts Acts, 1853-1891, and the Endowed Schools Acts, the State, acting through the Charity Commissioners, exercises a general administrative and legal

* Royal Commission on Secondary Education, vol. i., p. 39.

jurisdiction over the vast mass of charitable endowments dedicated to this grade of educational service. "If," it has been remarked, "the Endowed Schools Acts were repealed, and nothing was substituted for them, the only consequence would be that a particular mode of reorganising certain endowments would thenceforth cease to exist. But if the Charitable Trusts Acts were repealed, and nothing was substituted for them, the consequence would be a revival of the lengthy and expensive process of the jurisdiction of the Chancery Division of the High Court."* And if it were conceivable that the jurisdiction of the Chancery Division of the High Court were abolished, and nothing substituted for it, the consequence would be, not only the probable misuse or alienation of immense sums of public money to private purposes, but chaos in some of the most necessary and valued relations of family life.

Thus, apart from the facts that large annual grants are already made by the State, through the Science and Art Department, in aid of certain branches of secondary education; that under the Local Taxation (Customs and Excise) Act of 1890 funds amounting to over £740,000 a year are made available for technical and scientific education, and almost wholly devoted to those purposes by the local authorities concerned; that a rate not exceeding 1d. in the £ may be levied under the Technical Instruction Acts by the Council of any county or borough, or by an urban sanitary authority; and that some portion at all events of the grant, made by Parliament in aid of Evening Continuation Schools and administered by the Education Department, is expended on teaching which is secondary, rather than elementary, in its character; apart from all these considerations, each of which is an indication of the tendency of Government to come into contact with secondary education, the existence of educational endownments is practically a fatal obstacle to the complete severance of all ties between the State and secondary schools. This was admitted by Mr. Edward Miall, one of the staunchest advocates of the view that "the education of the young, whose parents are above a condition of indigence, is a matter which scarcely falls within the legitimate province of civil government."† He maintained, indeed, that "spontaneous and natural agencies are slowly but certainly securing the desired results more efficiently and with far less disturbance of popular prejudice than any action of the Legislature or the Government could effect, and to these (the former) the work had better be left." But, though he regretted the very existence of educational endowments and held that, if they could be all absorbed, such would probably be the best use that could be made of them so far at least as education was concerned, he confessed that Government was bound to see to the fitting application of educational endowments. This, however, is to admit the impracticability, in this country at all events, of *laissez faire* in regard to secondary education. And Mr. F. D. Maurice, who approached the

* Report of Royal Commission on Secondary Education, 1895, vol. i., p. 21.
† Letter of Mr. Miall to the Schools Inquiry Commission, 1866.

problem from a very different standpoint, fixed on endowments as an index of the fact that education can never be simply a matter of individual concern. Writing to the Schools Inquiry Commissioners almost at the same time as Mr. Miall, Mr. Maurice said: "Endowments suggest the thought that education has some relation to the past and to the future; the tendency of the middle-class is to confine it altogether by the judgments and demands of the present time. Endowments proclaim that money may be made subservient to the promotion of ends which are above itself; the tendency of the middle-class is to make it the main motive and reward of education and of every other work in which human beings are engaged."*

So far, therefore, as England is concerned, it is not a choice between the supervision of secondary education by the State, and the continuance of a condition of entire abstention by Government from any interference with secondary schools. State supervision exists already, and appears to be inevitable under the circumstances. The matter really at issue is to what points that supervision shall be addressed. Mr. Herbert Spencer points out that the question of *curriculum* is the most important in the whole field of education. He refutes the objection that "a system of complete *laissez-faire* is the logical outcome of the doctrines which he sets forth," and maintains that "the question of transcendent moment is, not whether such and such knowledge is of worth, but what is its *relative* worth. Remembering how narrowly the time for acquisition is limited, not only by the shortness of life, but still more by the business of life, we ought to be especially solicitous to employ what time we have to the best advantage. In education, this is the question of questions which it is high time we discussed in some methodic way . . . Before there can be a rational curriculum we must settle which things it most concerns us to know."†

This question of curriculum, the choice of which must in any case be left to some adult judgment acting for the child, is in Prussia entrusted to the central authority of the State, conceived as being the organ through which the mass of the best informed adult judgment of the time can act with the greatest precision and the most highly concentrated knowledge. No part of the whole problem of education has received, at the hands of the Prussian Government, more exact and continuous study than this of curriculum. It is regarded as the point round which all turns, and on which all right educational policy chiefly depends. In this country also, it is true, the State has had some regard to questions of curriculum in secondary schools (in the rules for Schools of Science, for example, and in many schemes under the Endowed Schools Acts), but, as compared with what has happened in Prussia, the action of the English State in this matter has been incomplete and somewhat desultory in character. We are apt to think that curriculum is a matter of secondary importance, and that "whate'er is best administer'd, is best."

* Report of Schools Inquiry Commission, 1868, vol. ii., p. 53, *seq.*
† *Education, Intellectual, Moral, and Physical*, pp. 6-7, and pp. 67-69.

We have no official document comparable in range and general significance to the Prussian "Lehrpläne für die höheren Schulen" (curricula and courses of study for higher schools) a little book which may not unjustly be called an educational masterpiece.

It must not be forgotten, however, that the exact classification of the various types of secondary schools in Prussia is not a thing of yesterday. It represents the results of a policy of supervision extending over ninety years—and those years of the utmost significance in the life of the nation. The building up of a system of highly organised secondary education, balanced and scientifically ordered in all its parts, is *un ouvrage de longue haleine*. When schools have been permitted or encouraged for many years to grow up or remodel themselves on a variety of plans, it might well prove an impossible task to establish among them any such principles of classification as have formed part of the policy of the Prussian Government at least since 1859, not to name an earlier date. Nevertheless, as Dr. Gow has remarked, secondary schools do necessarily tend roughly to classify themselves in their efforts to meet certain permanent needs of the country. And what, perhaps, might be regarded as sufficient for English needs would be some such "classification and co-relation of secondary schools" as is outlined in the draft scheme adopted by the Headmasters' Conference in 1894, and submitted by them to the Royal Commission on Secondary Education in the same year.* It is evident that the consideration of questions of curriculum would be a necessary part of the working out of such a scheme.

There are other circumstances which have rendered it easier for Prussia to establish a clear classification of secondary schools than could be the case in such a country as England. In Prussian secondary education, everything turns in the last resort on the privileges which the State can bestow on the schools it approves. These privileges consist only to an insignificant degree in money grants. By far the most important of the privileges are (1) the right of entering on the further courses of study preparatory to the different professions; and (2) the right of giving scholars, who satisfactorily complete a stated course of study, exemption from one year's military service. It will be observed, however, that the first of these two kinds of privilege turns on the State organisation of the professions, and on the State control of the Universities and of the Higher Technical Schools; while the second is conditioned by universal military service which makes possible the privilege of partial exemption. But these considerations do not touch the question whether or not care is desirable in so adjusting the curricula of recognised secondary schools as to secure their rendering the most effective service to the nation at large. The fact that it is more difficult under some circumstances than under others to find an effective sanction for the due maintenance of salutary differences in

* Report of Royal Commission on Secondary Education, vol. v., pp. 306 *seq.*

educational supply, renders the problem more complex but not less urgent.

Another reason which has made the differentiation of the various types of secondary schools easier in Prussia than it would be in England is the fact that theirs is a day school system and ours a mixed system of day and boarding schools. In an ordinary Prussian town there is always a class of boys whose parents desire for them the best available kind of secondary education within daily reach of their own home. In an English town of the same size, a large number, possibly a majority, of the corresponding class of boys will be sent away by their parents to boarding schools from the age of 10 onwards. This at once affects the whole problem of secondary school supply. If it is often hard even in Prussia to maintain a Gymnasium in a small town by reason of the limited number of boys requiring the full term of a fully classical education, it is likely to be much harder in an English town of similar size to establish or keep up a corresponding type of school when half or more than half of the boys who might attend it are sent off to boarding schools instead. And the difficulty does not end here. Parents are naturally interested in the schools to which they send their lads, and to which perhaps they and their friends of their own generation have also gone. But they will not feel, save under exceptional circumstances or under the strong impulse of public duty, an equally close concern in the fortunes of a local day school which they do not think the most suitable for their own children. The result is that there does not grow up the same kind of local pride in the local secondary schools which is such an important factor in the Prussian system. And this affects not only the financial interests of the schools but their *clientèle*, their standing, and their prestige.* Add to this the facts that with us the State does not, as in Prussia, fortify the headmaster by an authorised and approved curriculum against the varying and often ignorant whims of individual parents; but that, on the contrary, the headmaster's success is often estimated, both by his Body of Governors and by the public at large, rather on the basis of the number of scholars he manages to attract than by his steadfastness in adhering to one or other educational aim; and the differences in the educational position in the two countries becomes even more apparent. In Germany a headmaster is paid a salary like the colonel of a regiment: his income does not vary, by means of capitation fees or otherwise, with the turnover of his business. At the famous Conference on secondary education, held at Berlin under the Kaiser's presidency in 1890, Dr. Kruse, Provincial School

* As an illustration of the high degree of educational knowledge displayed in many German municipal documents on secondary schools, I would refer the reader to the "Gutachtlicher Bericht des Oberbürgermeister Fuss an den Magistrat zu Kiel über seine Reise zur Besichtigung der sogenannten Reform-schulen in Altona und Frankfurt-a-M. und über die notwendige Teilung und Umgestaltung der Kieler Oberrealschule" (printed in the *Zeitschrift für lateinlose höhere Schulen*, November, 1896). This report to the Town Council of Kiel on certain questions concerning the proposed reorganisation of one of the secondary schools in that city shows a mastery over some of the most intricate and difficult problems in modern secondary education.

Inspector of Danzig, said that he was once taken by the mayor of a little town in West Prussia to see a so-called secondary school in the place. Dr. Kruse heard some of the lessons, and finally asked the headmaster, "What is the special function of this school?" The answer was, "We prepare boys here for Gymnasien, Progymnasien, Realgymnasien, Realprogymnasien, Oberrealschulen, agricultural schools, and commercial academies." The tale was received by the Conference with shouts of laughter. But I remember hearing an eminent English authority say, with nothing but approval for the energy involved, that under a certain headmaster a certain secondary school in this country was in effect and at the same time a first-grade school, a second-grade school, and a third-grade school. This kind of "universal providing" is foreign to the traditions of Prussian secondary education. The Germans regard school-keeping as a professional art rather than an organising enterprise. They expect the headmaster to be the inspiring influence in the intellectual life of the school, to throw his energies into the work of developing the teaching to the highest possible point of efficiency and intellectual force, rather than to be an administrator, an organiser, an opener out of new forms of many-sided activity in different educational directions. Our secondary schools are much more composite in character than are those in Prussia. Our educational fauna, as often happens on islands, is distinct from the fauna on the neighbouring continent.

But in saying this I am far from wishing to disparage the English system, which indeed, apart from its own intrinsic and admitted excellences, is far more congenial to English habits than the German system could ever be. Nor must it be forgotten that many possibly unwise concessions which have been made by secondary schools in various places to local demands have in fact been practically inevitable and regretted by none more than by the headmasters themselves. And some other developments, however much to be deplored from the point of view of strict classification, have been carried out by men acting under a noble impulse of public duty and in the disinterested desire to make higher education attractive or possible to families previously deprived of all opportunity of obtaining it. My wish is rather to call attention to the fact that the great thing in education is not quantity, but quality; that the desire to be extensively useful does not necessarily coincide with the faculty of being educationally first-rate; and that, in our composite system of secondary education, some schools are apt to illustrate what the entomologists call "protective mimicry," that is to say they enjoy immunity or increased importance through the fact that to the casual observer they look as if they belonged to a species which is not really theirs.

XIV.—The Contrast between Day Schools and Boarding Schools, and its bearing on Prussian as compared with English, Secondary Education.

It is characteristic of Prussian secondary education that practically all its best schools are day schools. The same cannot be said of England. This difference cuts very deep into the whole question. But a brief reference to some of the issues involved is pertinent, and indeed necessary, to any comparison between the Prussian and the English systems. For good or evil, the boarding school has a much more intense and subtle influence over the boy than a day school can ever have. The contrast is thus stated in the Report of the Royal Commission on Secondary Education in England (1895):—

"The tone and character of the home, the ruling interests and ambitions of the parents are much more potent and constant factors of the result in the day than in the boarding school. Ideally the day school may be the more perfect system, for the presence of the child is as good for the home as the influence of the home ought to be good for the child. Each educate the other; and the parent may lose more from being without the responsibilities and restraints imposed by daily contact with a quick and critical boy or a sensitive and observant girl, than he or she loses by being withdrawn from parental supervision and care. Besides, a system which, as a fundamental condition of the educational process, postulates the complete separation of the sexes, is conducted without some of the more refining influences which nature supplies. But this only shows how hard it is to create equal terms between the day and the boarding school. In the former case, the master has to do his work under the direct help or hindrance of home; in the latter case, the home is more remote, and, though it is ever in the background, exercising a favourable or unfavourable influence, yet the pupil is much more completely in the master's hands. He has, therefore, an opportunity such as seldom comes to the day-school master, though that opportunity has drawbacks of its own. The individual scholar is a greater force for good or evil in a boarding than in a day school, but then the very function of a master and the distinguishing quality of capacity for his place, is ability to neutralise and overcome the evil influence of the bad, and to use and enlarge the ameliorative influence of the good. And along with this potency of the individual goes the power of the school, the action of its traditions and its history, the memory of its heroes, the pressure of its public opinion, of its established customs and fixed habits—in a word, the corporate feeling, or *esprit de corps*, which at once enforces discipline and produces characters of a specific type. On the other hand, the day school is in things educational a stronger local force; if it feels more easily and deeply the influence of the home, the home in turn is more susceptible to its presence. It stands open to the neighbourhood, visible to its eyes, accessible to its ambitions; what it can do for the competent is manifest to all, every success achieved in it and through it being a challenge to imitation or emulation. For a school to be non-local may mean that a locality hardly feels the presence or the meaning of the school, while the more a school lives in and through and for a locality, the more it enables the locality to achieve. Thus the day school exercises a more direct influence on its neighbourhood, is less respective of class, and more common to the whole people, and, in order to its healthy life, needs a keener and more widely distributed interest in education. But the neighbourhood is, as a rule, very different in the two cases. The fit home of the boarding school is the country or the country town; but the day school needs a population around it, and so has its proper seat in our great cities or towns." *

* Report, vol. i., pp. 138-9.

It is remarkable that we in England who have shown so strong a bias towards individualism in our educational arrangements, should have developed to a higher point of perfection than any other modern nation that type of secondary school which brings to bear on the individual boy the strongest pressure of collective discipline and corporate tradition. But the fact that the normal type of secondary school in Germany is the day school has had a correspondent influence on the intellectual character of its work. If we take the late Mr. Thring's description of the duties of a boarding-house master at a great English public school we find that, after describing the master's actual teaching work, he goes on "and yet only half a master's duty, and that the least half, has been touched upon. He has the whole domestic management, discipline, and life of a certain number of boys in his hands for which he is responsible. . . . Year by year under his roof comes all the evil as well as all the good of English homes. He has to train these boys to be honourable, free men. He must believe, even against belief, that freedom and liberty to do everything a wise father would wish his son to do is the only sure means of making boys free men; and that prison walls and prison discipline are no training against vice."* Mr. Thring writes in another place (pp. 190 *seq*):—

"In a house by itself" (*i.e.*, a separate boarding house at a great school) "a small number of boys are knit together in a little commonwealth. The house master and his wife have the entire management, subject to the main school laws. No other authority or power, whether of boys or masters, interferes with their own little kingdom. They take, naturally, under these circumstances, a great interest in their house, for it is their own, unmixed with any other influences. They can, and do, become very intimate with their boys, and their boys with them. In fact, it is to both parties a home, and there is a home influence and home refinement about it. . . . The boys, on their part, love their own house and uphold it. It has a character which they are jealous about. They rejoice at their house being distinguished in school; they rejoice at its triumphs out of school. In the games house plays house in friendly rivalry, and great amusement and much friendly life is the result, an *esprit de corps* of the best kind. . . . There is plenty of common life, plenty of public interest to make the school one; to bind it closely together and weld it into one body, without in the slightest degree breaking in on the domestic character and valuable responsibilities of the separate houses. Two opposite and most necessary principles are both secured by this system; the civilisation and gentler feelings of comparative home, with all the hardy training of a great school. The common classes, the common games, the common school-honours at the Universities and in the world bind the boys closely; nothing is lost in this way; whilst the narrower circle of the separate house ensures a more kindly and careful treatment than would otherwise be possible."

And further, it is not only the boarding house masters who have intimate and personal relations with the boys out of school hours. The work of the class-room is only a fraction of the labour gladly and unselfishly undertaken by all the masters at a school in which the high English tradition prevails. Anyone who has had the privilege of being brought up at one of these

* *Education and School.* By the Rev. Edward Thring, headmaster of Uppingham School (Macmillan, 1867), p. 128. This book is perhaps the best account ever written of the aims of a modern English boarding school of the first grade.

schools looks back with ever-increasing gratitude on all that was done for him there. As he himself grows older and more experienced in the claims and absorbing cares of life, he understands more clearly what it must have cost the masters, in point of time and thought and unsparing pains, to give to him individually, and to many others also individually, so much help and counsel, companionship in leisure and encouragement in difficulty. And as he becomes able to compare the abilities of leading men in other walks of life with those of his old teachers, he realises that in his school days he had the inestimable benefit of coming under the direct and personal influence of men who, by any standard of comparison, would be justly counted *φυλακικώτατοι πόλεως*

Such is the noble tradition in the English Universities and in the best English secondary schools. Of course everyone knows that it is not realised everywhere or in all cases, and that of the very system of the boarding house itself the old saying is true, *corruptio optimi fit pessima*. Nevertheless, the tradition is firmly set and grows stronger year by year, diffusing itself by natural overspill of influence into day schools too and into schools of other grades.* It is the most precious possession of English training, and fruitful in all manner of lasting good. It does not lend itself to analysis in text books, and it cannot be imparted by codes of rules. It is above all a matter of example. "It wil give birth to a living teaching which in course of time will take the shape of a self-perpetuating tradition or a *genius loci* as it is sometimes called: which haunts the home where it has been born, and which imbues and forms, more or less, and one by one, every individual who is successively brought under its shadow."†

Now in a system of secondary education, in which the needs and opportunities of the day school have long been dominant, the characteristic excellences of mastership will naturally differ from this. Given the same devotion and unflagging care on the part of the teachers, their energies will express themselves otherwise and in another kind of skill. It will be natural for them to focus more of their work and strength on the intellectual side of school training. The standard of comparison between school and school will tend to be stated in terms of intellectual attainment. In the natural up-growth of professional ideals, men will measure themselves against standards of expected achievement in the task of imparting knowledge, of disciplining the intellectual faculties of their pupils, in perfecting methods of instruction, in graduating courses of study, in concentrating the interest of a curriculum, in building up a high normal level of mental attainment among the scholars who complete the appointed course. And with this will naturally be connected the growth of a literature on the science and art of teaching, the expectancy of complete professional preparation for the teacher's work, a special interest in

* Cp. on this subject a paper on *The Future of Day Schools*, by Mr F. J. R. Hendy in the *Journal of Education*, February and March, 1895.

† J. H. Newman. *Idea of a University*, p. 147.

the investigations of psychology, in a word in the application of scientific method to the problem of instruction. In all this, the German secondary schoolmasters as a body excel our own. If, as has been the good fortune of the present writer, one is admitted to the conference of teachers in a German classical school and then passes on into the society of masters at a great public school in England, one finds that each group of men talk a great deal about their school, but that they talk about it from very different points of view, and generally about very different aspects of its work. This contrast is due to differences in tradition, in previous education, in habits of thought and in the claims on the masters' time.

One of the most pleasing traits in German books about education is the hearty and almost affectionate acknowledgment which is always made of the self-devotion of the teachers. And the foreign student who visits their schools well knows how unfailing is their courtesy, how wide and exact their knowledge of the conditions of their work, how ready they are at all times and even at the cost of much inconvenience to explain and illustrate their methods, to compare and analyse their results. The German secondary schoolmaster believes, and rightly believes, that his country leads the world in thoroughness and precision of thought on a certain range of educational problems. He lives in an atmosphere of inquiry into the scientific aspects of his work. He is not an amateur. He is conscious of being a member of a learned profession. He knows that there lies round him a body of precise and formulated knowledge as to the conditions of teaching. To this body of knowledge he is ever seeking to make some contribution, to add a stone to the edifice which has been building for generations. He knows the limits of originality. He is warned off by recorded failures from entering upon paths which may look attractive, but have been proved to be no thoroughfares. He does not over-value desultory and disconnected experiments. He has been trained to think things out on principle. He knows that his work will be subjected to expert criticism, and he prefers to have it so. And, because of all this, he is perhaps a little over-conscious of precedent; a little afraid of the simple revolutionary questions; keenly alive to all that fundamental changes in method and organisation would involve; somewhat dominated by the prevailing doctrines of pedagogy; somewhat unaccustomed to measure the good and the evil of systems of education less uniformly excellent than his own; and comparatively unfamiliar with the problems and opportunities afforded by the daily and less formal intercourse between boys and masters in a great boarding school, with its strong traditions alike in work and play.

It would be a gain to both sides if the masters in English and German secondary schools knew more of one another. We know what Sturm was to Ascham, Comenius to Samuel Hartlib, what Pestalozzi's influence has been to Mr. Herbert Spencer, and conversely what Locke's was to Basedow and Dr. Arnold's to Dr. Wiese. There is much truth in the remark that, were it possible to combine the different merits

of the best English and the best German secondary schools, the result would be the best system in the world.

No man can become a master in a German secondary school without having passed through a very long and stringent course of special preparation for his work. The intellectual qualifications which he is required to possess are more varied than those usually looked for in this country. That he must be a man of high character goes without saying. But he has also to know a great deal, to know it all very well, and to give proof that he can make others know it too. As contrasted with this, it may be well to quote passages from two letters written by Dr. Arnold, one a letter of inquiry for a master and the other addressed to a master on his appointment at Rugby.

". . . What I want is a man who is a Christian and a gentleman, an active man, and one who has common sense, and understands boys. I do not so much care about scholarship, as he will have immediately under him the lowest forms in the school; but yet, on second thoughts, I do care about it very much, because his pupils may be in the highest forms; and, besides, I think that even the elements are best taught by a man who has a thorough knowledge of the matter. However, if one must give way, I prefer activity of mind and an interest in his work to high scholarship; for the one may be acquired far more easily than the other. . . . It is my great object to get here a society of intelligent, gentlemanly, and active men, who may perpetually keep up the character of the school, and make it *vile damnum* if I were to break my neck to-morrow."

"The qualifications which I deem essential to the due performance of a master's duties here may in brief be expressed as the spirit of a Christian and a gentleman—that a man should enter upon his business, not ἐκ παρέργου, but as a substantive and most important duty; that he should devote himself to it as the especial branch of the ministerial calling which he has chosen to follow; that, belonging to a great public institution, and standing in a public and conspicuous situation, he should study things 'lovely and of good report': that is, that he should be public-spirited, liberal, and entering heartily into the interest, honour, and general respectability and distinction of the society which he has joined; and that he should have sufficient vigour of mind and thirst for knowledge to persist in adding to his own stores without neglecting the full improvement of those whom he is teaching. I think our masterships here offer a noble field of duty, and I would not bestow them on anyone who I thought would undertake them without entering into the spirit of our system heart and hand." *

It would be misleading, however, to speak of our great boarding schools as if in them alone were to be found examples of the higher type of English secondary education. A striking development of the last twenty years has been the rising distinction of many first-grade day-schools in the metropolis and other large towns. Nor are in England the boarding-schools an entirely separate class from the day schools. The two categories shade off into one another through intermediate varieties. But it is natural that, in some of their characteristic features, the day-schools should differ in greater or less degree from those which are mainly or exclusively boarding-schools. Neither type of school can wholly reproduce the characteristics of the other.

The practice of entrusting large responsibilities in the internal government of the school to certain of the elder boys, who are

* Quoted in Stanley's *Life of Arnold*, chapter iii., pp. 91-2.

known as prefects or præpostors, is one of the salient features of English public-school life. In German secondary day-schools there is nothing really analogous to it. There can be no doubt that this system of school discipline has been one of the most powerful factors in the creation of what we know as the English public-school tradition. It developes the governing faculty. It accustoms boys at an early age to bear heavy responsibilities. It stimulates their public spirit. It strengthens their administrative powers. In the case of some boys, possessing a too sensitively conscientious temperament, the duties imposed by the system may at times involve mental and moral overstrain,* but nevertheless the good of the system has largely outweighed the evil, and many English public-school boys must have learned at least as much from the discharge of their duties as prefects as from the actual instruction which they received in the class-rooms. It is to the fact that the majority of our greatest secondary schools are boarding schools, that the development of this part of their discipline is principally due. This point was emphasised by Dr. Arnold of Rugby, who, though he did not originate the system, was largely responsible for its wider recognition and development. "If you have a large *boarding*-school," he wrote in 1835, "you cannot have it adequately governed without a system of fagging." He explained and defended the system in the following words:—

"A government among the boys themselves being necessary, the actual constitution of public schools places it in the best possible hands. Those to whom the power is committed are not simply the strongest boys, nor the oldest, nor yet the cleverest; they are those who have risen to the highest form in the school; that is to say, they will be probably at once the oldest, the strongest and the cleverest; and further, if the school be well ordered, they will be the most respectable in application and general character—those who have made the best use of the opportunities which the school affords, and are most capable of entering into its objects. In short, they constitute a real aristocracy, a government of the most worthy, their rank itself being an argument of their deserving. And their business is to keep order among the boys; to put a stop to improprieties of conduct, especially to prevent that oppression and ill-usage of the weaker boys by the stronger which is so often ignorantly confounded with a system of fagging. For all these purposes a general authority over the rest of the school is given them; and in some schools they have the power, like the masters, of enforcing this authority by impositions; that is, by setting tasks to be written out or learnt by heart for any misbehaviour. And this authority is exercised over all those boys who are legally subject to it; that is, over all below a certain place in the school, whatever be their age or physical strength; so that many boys who, if there were no regular fagging, would by mere physical force be exercising power over their schoolfellows, although from their idleness, ignorance and low principle, they might be most unfit to do so, are now not only hindered from tyrannising over others, but are themselves subject to authority, a most wholesome example, and one particularly needed at school, that mere physical strength, even among boys, is not to enjoy an ascendancy. Meanwhile, the governing part of the school, thus invested with great responsibility, treated by the masters with great confidence and consideration and being constantly in direct communication with the head-master, and receiving their instruction almost exclusively from him, learn to feel a corresponding self-respect in the best sense of the term; they look upon themselves as answerable for the character of the school, and by the natural effect

* Cp. for example, in the *Poems and Prose Remains of Arthur Hugh Clough* (Macmillan, 1869), vol. i. (Life and Letters), pp. 10 and 68.

of their position acquire a manliness of mind and habits of conduct infinitely superior, generally speaking, to those of young men of the same age who have not enjoyed the same advantages." *

Of late years, however, some changes in the conditions of public-school life have led experienced observers to regard the development of this system in a rather less favourable light. The organisation of school-life has become more complex, and the duties of some of the prefects have consequently become more elaborate. The intellectual standard which the boys are required to reach in their school-work has become more exacting, and this has imposed on the prefects an additional strain at the very time when their administrative duties are most engrossing. Thus the very improvements which have taken place in the public schools,† have incidentally increased the difficulty of maintaining the system of internal government in its older form. Again, there has been a great development of the athletic spirit in the public-schools, and this has led, in some cases, to its being thought desirable to admit to the rank and responsibility of prefects some boys who are distinguished rather for physical prowess than for mental attainment, while in some other cases those of the prefects who are good at games have been known to form among themselves what is in effect an *imperium in imperio.* This may sometimes be unavoidable, and, within due limitations, often nothing more than a recognition of the fact that skill in book-learning is by no means the only basis for real authority, either in school-days or in later life.‡ But that the tendencies, of which the above-mentioned facts are some of the indications, excite serious misgiving in the minds of many competent observers is shown by

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* In the *Journal of Education*, 1835. Reprinted in Thos. Arnold's *Miscellaneous Works*, 1845, pp. 372-3.

† Cp. Mr. Tarver's *Debateable Claims, Essays on Secondary Education.* (Constable. London, 1898, p. xxvii.) "The improvements that have been made in the last fifty years in the housing of boarders, which are apparent to everybody, are only the external indications of an equally great improvement in the methods of teaching and discipline."

‡ This point of view is brought out, in regard to the choice of public schoolmasters, by Mr. Cotterill in his *Suggested Reforms in Public Schools.* (Blackwood, 1885, pp. 86 seq.) "It is men of force of character and general vigour, both of mind and body, that are most indispensable as schoolmasters. If a sufficient number of such men can be found without going below the first class" (*i.e.*, of University honours), "by all means let headmasters go no lower; for they will have secured the best possible combination—the ideal schoolmaster. But who believes that it is so? . . . Many a boy is led to think lightly or contemptuously of one of the noblest of all human possessions—a highly cultivated intellect—because he sees that it is so often accompanied by a weakly and neglected body, because its possessor is a half-man; or, from his observation and knowledge of many of the men who have succeeded in obtaining posts of distinction, owing to their high intellectual attainments, he may jump to the conclusion that the one-sided method which they pursued to obtain their ends is the only method open to him: that to become a successful man, he, too, must become a half-man. Further, by a *real man* only can real men be formed. Character begets character, and strength strength. How sickly many of us schoolmasters are, not so much because our present lives are lived in defiance of nature's stern laws (for many of us are, after the neglect of these laws in our early youth, seeking now to conform to them), but because the seeds of weakness or disease were sown in our boyhood and youth. Are such as we usually the type of man that we should wish our boys to strive to become? And those of us who are for ever impressing upon our boys the religious duty of having sound minds in sound bodies, what sad examples often are we of men whose bodies at least are assuredly not sound?"

the following observations written by one who has had special opportunities of judging the present tone of our great public schools.

"The very essence of public school-life has been the system of self-government in the hands of the Prefects, and the difficult problem—a problem which promises to press even more heavily in the future—is: Can this be carried on, when success in examinations is the criterion of industry, and sometimes the only reason for the popularity of a school, and when special training or 'cramming' is necessary to ensure this success? The plain question is: 'Will the prefect system have to go?' The calls upon the time and attention of a Prefect in a public school are as clearly defined as they are numerous; they are the regular days of 'duty,' preserving law and order in the house during preparation and other times; the active support of school institutions, such as literary and debating or other societies, or editing the school journal. In the modern professionalising of athletics, if he is captain of any game—sometimes it is enough if he be one of the representatives—his attention to school work will be nominal, and his position with its duties is held by parents as well as masters to be sufficient excuse for failure in school work. It is a common practice nowadays to select the head of a school from among the body of Prefects irrespective of his place in the Sixth, and to make Prefects of boys of character and leading, more or less irrespective of their place in the school. The practice has grown out of the recognition of qualities other than intellectual superiority, and it seems to carry with it the practical advantage of relieving what we may call the working Sixth of many of its cares. This, however, is no real reconciliation of the conflicting interests in the public schools of to-day. It emphasises the sharp division between workers and players, between the student and the boy of action: and in the long run learning suffers, even if it is not degraded. Intellectual interest and the love of true learning hold the awkward place in a triangular duel: they are exposed to the attack of the craze for athletics on one side and of cram for examinations on another. It is easy and common enough to adopt a cheery optimism: to say that somehow things right themselves; that the true love of learning is found in our schools, and in some way receives more encouragement than before. It may also be impossible, and therefore unnecessary, to reconcile fully the conflict of interests: and it would not perhaps be difficult to show that the English people, in having to choose a side, have always preferred the education which forms character to that which fosters learning. We never tire of repeating that Waterloo was won on the playing-fields of Eton. But while all this may be cheerfully admitted, we are still leaving out of account some of the most serious points for reflexion. The born student, it is true, can be left to take care of himself, but what of the average Sixth Form boy whose instincts are half-formed and untrained? What effect will it have on the mass to raise false standards and to allow meaner and more trivial aims to be the object of existence? And if the purpose of public school education with us is above all and at all costs to form character, what is the character which our present system is actually stamping upon men? We are a long way from Waterloo, and English temperament and character have been and still are undergoing many striking changes: are the qualities which are now developing amongst us all, and not least among our public school men, the qualities which will win?"*

Another writer, who speaks from intimate knowledge of the work of one of our most famous day secondary schools, regards it as one of the advantages possessed by day-schools over boarding-schools, that in the former the elder boys are exempt from some of the more engrossing claims of the prefect's position. In other words, under the conditions of day-school life, a boy's energies may be turned more completely into intellectual

* Rev. H. M. Burge in Mr. Cookson's *Essays on Secondary Education*. (Oxford, University Press, 1898), p. 61.

channels than is generally possible when he is charged with responsible duties in the government of a boarding-school. But, of course, this concentration of energy will depend in some measure on the atmosphere of the day-boy's home, largely on his having sufficient strength of character and fixity of purpose to resist the distractions which he may meet with there, and partly also on the drift of public opinion in the school itself. There is no doubt that in the ordinary German day secondary school the home and school conditions are generally favourable (sometimes perhaps even too favourable) to unremitting application to intellectual studies. The passage to which I have referred above is as follows:—

"Another advantage" (*i.e.*, of day schools as compared with boarding schools), "particularly in the highest forms of a school, which follows from the fact that a boy lives at home, is that his time out of school is not so entirely taken up with matters of school and house management as is too often the case with the Sixth Form boy in a boarding house. I should be the last person in the world to undervalue the advantages of the monitorial system as it affects Sixth Form boys themselves no less than as an instrument of government. The fact, however, remains that the more conscientious a præpostor, the less time he has to himself outside his form room. It is not, I believe, rare for such a boy deliberately to sacrifice his own work, about which in itself he may be eager enough, for the sake of some duty, disciplinary or athletic, which seems at the time to have, in the strictest sense of the word, higher claims. Even if this is an exaggerated statement, at least the day boy is free from such distractions. . . . The day boy loses much, very much, by the absence of what many men would regard as the most valuable part of their education; but the extent of his loss need not be exaggerated. Since Arnold's time, in the hands of a series of wise head-masters, the monitorial system has come to be a most valuable part of our public school organisation; in some schools it was possibly such at an earlier date. But it is, perhaps—though I hesitate to say it—not the essential part, and the virtues characteristic of public school men are, I believe, obtainable, though not so easily, nor perhaps to the same extent, without it. And even now it is not free from abuses. It has lent itself to the modern craze for athleticism in a not altogether creditable degree. The leading athletes nowadays in most schools are also the leading monitors, and they are so too often in virtue solely of their athletic prestige. If they were not admitted into the official hierarchy they would set up one of their own, which the school at large would recognise as the more legitimate. But it is a dangerous policy to call in the barbarians for the protection of the empire." *

In making any contrast between German and English secondary schools, it is necessary to allude to the different part which athletic interests play in the two systems. School games occupy a much larger part of the mind of the ordinary English schoolboy than they do of the German. Athletic skill counts for much less in German than English secondary school-life. Everyone admits that cricket, football, and other games are, within certain limits, most valuable factors in our system of secondary education. "No one can doubt," remarks a recent writer, "that, for English lads at all events, atheletics furnish a salutary, potent, and necessary contribution" towards the training of character. And efforts are being made in Germany, under high authority, to stimulate interest in this side of school training. But the high

* Mr. Cookson in the volume of *Essays on Secondary Education*, edited by him. (Oxford. University Press, 1898), p. 70.

point of development which school games have reached in England could not have been attained, had not a considerable number of the masters been themselves keenly interested in athletics, and themselves skilful players. This is a side of the question which is sometimes overlooked in theoretical treatises on the professional training of teachers for secondary schools.

It has been pointed out* that school athletics develope personal courage and good temper, strengthen discipline, teach unselfishness "in working for one's side rather than for oneself," independence and *savoir faire*, and "a certain adaptability of character which will make a boy hereafter capable of mingling with all sorts and conditions of men, without shyness on the one hand or presumption on the other"; and, further, that "the system of to-day is closely bound up with the maintenance of intimate and friendly relations between teacher and taught, between master and boy. For the maintenance of such relations there is needed some neutral ground, not connected with the extraction of work or giving and receiving moral harangues, on which the two parties may meet and fraternise, and in athletics just such a neutral ground is provided." This development of school games into an important part of school training has been facilitated by the special opportunities for regular athletic exercise furnished by boarding-school life.

On the other hand, there is a consensus of experienced opinion that in many English secondary schools the present danger lies rather in the excess than in the defect of athletic interests.

"Athletics are good, but it is possible to have too much of them; and that is undesirable. The question is certainly one which all who care about education are bound to take into account. For some time past, people connected with the Universities and public schools have been asking themselves whether athleticism has not been developing into something like a tyranny, and the worship of athletics into an idolatry. . . . What really dismays thinking men (who are not necessarily non-athletic men) is the attitude of public opinion on the subject. The schoolboy conviction that athletics are the one thing in the world worth caring about tends to thrust all other interests into the shade . . . That there is at school a tyranny of athletics and an idolatry of athletics, the writer believes."†

In some cases, perhaps in many, parents are much more actively interested in the athletic than in the intellectual progress of their sons. This shows that the present tendency, though it has an immediate bearing on school-problems, is by no means a purely school question. The prominence of the subject is illustrated by the following story, told by Mr. A. H. Gilkes, headmaster of Dulwich:—

"I was lately dining in the company of a gentleman, a parent, who after dinner said to me with some feeling in his tone that he had that day taken his son to ——, naming a great school, and that he had taken the opportunity given him by the parting to give his boy the best advice in his power. I said the occasion was well chosen, for that when a boy was going into a strange and perilous life he needed guidance; and, moreover, that then his

* By the Rev. Lionel Ford, Assistant-Master in Eton College, in a paper on "Public School Athletics" in Mr. Cookson's *Essays on Secondary Education*, pp. 285 seq.

† Rev. L. Ford in Mr. Cookson's *Essays on Secondary Education* (1898), pp. 284, 295, and 299.

heart was soft and open, and then he would receive and remember what he said. The father agreed with me, and said the advice which he had given his boy was to take up bowling rather than batting, as likely to be of much more service to him." *

XV.—The Advantages and Dangers of having a Formula for the "General Education" expected as the Normal Outcome of each Type of Secondary School.

From the fact that the German secondary school tends to throw great stress on the broad intellectual attainments of its pupils, there arises a special danger to which reference must be made. A recent German writer has remarked, as "characteristic of an earlier generation of learned persons" in his country, that they should have borrowed from the Greeks the name "Gymnasium," and have applied it to a class of secondary schools without taking over a trace of the wonderful care for physical training which marked Greek education. "Our schools," he says, "aim too exclusively at erudition" (Gelehrsamkeit).† A good deal is being attempted to correct this one-sided tendency, but the fact remains that, as the main interest has for generations been focussed on the intellectual side of secondary school work in Germany, common practice has reached so high a standard of average attainment as to make it difficult to abate its somewhat exacting demands.

The ground-thought which underlies all secondary education is that, before a man can practice a profession or perform any duties which are professional in the range of knowledge required for their effective discharge, he ought to possess a certain level of general knowledge worked up by the operations of teaching and of intellectual discipline out of the condition of mere disconnected information into the kneaded consistency of culture. The formula of the constituents of this general knowledge varies from age to age, and (though within narrowing limits) in different civilised countries. Broadly speaking, secondary education is everywhere in two grades—the one ending at sixteen, the other at eighteen or nineteen years of age. Each grade has its own formula for the general education normally expected to accrue from it, though this formula is more precisely fixed in some countries than in others. Might we not fairly expect a youth, on completing his secondary education, to have, in the first place, some knowledge of religion,—some assurance, that is, as to the principles guiding conduct; next, to have at command a working and (so far as it goes) an accurate knowledge of three (or, in the lower grade, two) languages besides his own: to know the broad outline of the world's history, and, in some detail, the more recent annals of his own country; to have grasped the outlines of physiography and to have a general knowledge of the physical formation of the earth's

* *National Review*, September, 1897.

† *Der Mensch und seine natürliche Ausbildung*, von Arthur Schulz. (Berlin: R. Heinrich, 2nd edition, 1896), pp. 123 and 139.

surface and of its political divisions, with a closer acquaintance with the topography of his native land; to be accurate in arithmetic, and familiar with at least the earlier stages of algebra and geometry; to have a knowledge of the elements of physics and, possibly, chemistry, together with some acquaintance with natural history and with the meaning of scientific method; and, finally, to have some skill in the use of brush and pencil, as well as, where provision has wisely been made for this, in some other kind of manual exercise? To these requirements would naturally be added, as indispensable elements in all true education, some practice in the elements of vocal music, and a course of careful training of the physical powers. As between the two grades of secondary education, the difference in expected outcome is one of degree rather than of kind; we expect, indeed, the youth who has remained at school till nineteen to know at least one language more than he who has left at sixteen, and to have a deeper knowledge of the other branches of the curriculum; but we speak of one who has reached either of these two levels of attainment by the same form of words, used, indeed, with a subtle difference of meaning, as being "an educated man." Advanced studies, whether academic or professional, come later. They are built up on the basis of general knowledge, without which, indeed, they cannot in the true sense be profitably pursued at all. It is the general knowledge which we expect to be the outcome of the school. Of course, we do not always get it. "If to do were as easy as to know what were good to do," schools had not always been what they have been. But this is the aim which, so far as intellectual attainment goes, is "secondary," as distinct from "primary," in its character; and, in so far as this aim is disregarded or fallen short of, the work of the school on its intellectual side is not "secondary" at all.

I am far from meaning that, without enjoying secondary education in the strict sense of the word, men of exceptional ability, or of genius, or of that untiring industry and self-denial which amount to rare ability, cannot reach by private study and evening tuition something like the level which is the expected outcome of even the best secondary schools. But these men are exceptions, and even they would probably be among the first to admit that they had missed much in losing the help, criticism and discipline involved in the normal course of secondary education within the normal period of years. Nor do I forget that, under our English system, some youths complete, or attempt to complete, at the University, a course more appropriate to the school.

If, however, it is replied that there is no such generally recognised measure of attainment which parents and the public expect our lads to acquire before the completion of their course in one or other grade of English secondary school, I can only answer that, if that indeed be so, we are behind, and grievously behind, the greater part of German-speaking Europe and Scandinavia, not to speak of some other countries. It is not that youths of sixteen or nineteen should be prodigies of know-

ledge, still less that they should have a vague and inaccurate acquaintance with many subjects, none of which have been mastered or assimilated. It is in the fact of its being a well-connected whole, embracing the essential ingredients of liberal culture, that, on the intellectual side, the real virtue lies of a good secondary education. It is only after a certain point has been reached that specialisation is healthy, profitable or wise. And it is with the range of knowledge that must precede effective specialisation that, at any rate the second grade of secondary education is solely concerned. The lack of a certain measure of any one of seven things—religious knowledge, the discipline of mathematics, the discipline of science, the discipline of language, the discipline of literature, the discipline of history, and some manual and artistic training—constitutes a defect in intellectual culture and *pro tanto* weakens a man's claim to be called educated.* Milton had a clear idea of this general secondary education, of the "studies wherein our noble and our gentle youth ought to bestow their time in a disciplinary way," though he planned in his Tractate a scheme of work not beginning till twelve and lasting till twenty-one. He would have had "academies" for the giving of such an education set up "in every city throughout this land." And he laid stress on the essentially important fact that the pupils must not be allowed to forget one instalment of this necessary knowledge in the process of acquiring another, but that the whole course must be regarded as a single thing, and the natural outcome of it a basis of culture, solidly pressed down into the mind and affording a firm foundation for higher studies or for practical life. "In which methodical course," he wrote, "it is so supposed they (the pupils) must proceed by the steddy pace of learning onward, as at convenient seasons for memories sake to retire back into the middle ward, and sometimes into the rear of what they have been taught, untill they have confirm'd, and solidly united the whole body of their perfeted knowledge like the last embattelling of a Roman Legion."†

It is to be added that, in different types of secondary schools, these different disciplines will be applied in varying degrees. Some schools will lay the chief stress on linguistic studies, others on the mathematical, others on the scientific. But some insight into each of these disciplines during his school days an educated man ought to have had, and either the linguistic or the mathematical or the scientific, with some subordinate emphasis on each of the other two, ought to form the backbone of the intellectual training of the school. Mr. Jowett was once drawn by Sir James Kay Shuttleworth into saying, apparently with a touch of irritation, "I may be prejudiced, but I should think that a Cabinet which consisted of

* I am speaking here only of the intellectual side. It may well be argued that the "formula for general culture" should take account of mental and physical proficiency combined, as well as force of character. Cp. Mr. Cotterill's *Suggested Reforms in Public Schools*, p. 82.

† Milton's *Tractate on Education*. (Cambridge University Press, facsimile reprint of the edition of 1673), p. 17.

persons who only knew Latin and Greek would probably be a better Cabinet than a Cabinet consisting entirely of chemists." "But," he added, "I think it desirable that Cabinet Ministers, like other persons, should possess some knowledge of physical science,"* and it doubtless went without saying that over the door of the Council Chamber should be written, "Let no man enter here without at least a tincture of mathematics."

This question of the general education, aimed at and given by secondary schools, has a close bearing on the commercial efficiency of a country. An eminent Frenchman said recently to the present writer, referring to the kind of education which is all that so many of our boys get before they go into business, "'*Le go-ahead*' is all very well, but you need a good deal more than that now-a-days." It would be a grave error, however, to think of secondary education solely in terms of commercial advancement. Commerce, indeed, is so large a part of our national destiny that our higher schools cannot shirk the question what shall best fit men to be leaders in industry and captains in trade. But, though secondary schools must as far as possible avoid "merchant-marring rocks," there is a far higher duty laid on them than the mere equipping of lads to be the instruments of their own (or, oftener, of other people's) material gain. Against the meaner forms of the commercial ideal, the liberal secondary school may sound the necessary note of revolt. We are a governing nation, as well as a trading one. An essential part of the duty of our secondary schools is to train men who will be capable, often at an early age, of filling posts of high responsibility in every part of the empire.† And it also behoves us to have a somewhat closer and earlier knowledge of new streams of thought stirring the Continent of Europe. To some of those intellectual tendencies, we may apply Sir Thomas More's exclamation, "Aut tu es Erasmus aut Diabolus," but it is both perilous to ourselves, and to the general disadvantage of Europe, that we should, through lack of ready knowledge of foreign tongues, let them pass by us as generally unheeded as we do.

Two generations ago, the then much more limited number of English secondary schools had, in spite of the narrowness of their curriculum, an aim which, though not clearly expressed, was nevertheless pretty clearly felt. Then came the rise of scientific studies and the claims of modern history and literature, British and foreign. There ensued sharp criticism, a Royal Commission, and a struggle after which the old studies, though damaged in argument, remained in possession of much of the ground. Since that time the great increase in wealth, the wider applications of science and linguistic skill to industry and commerce, and the democratic impulse, have further complicated the problem by increasing the variety of demand for higher education. But it cannot be said that we in England have at any point set ourselves to think out systematically the nature of the new needs.

* Report of the Royal Commission on Scientific Instruction and the Advancement of Science, 1872, vol. i., Q. 3917, *seq.*

† Cp. Cotterill's *Suggested Reforms in Public Schools*, pp. 76-7, and speech of the Duke of Devonshire at Eastbourne College, July 23, 1898.

It is greatly to the honour of Germany in general, and of Prussia in particular, that it has made this effort at systematic thought. And her example has in consequence profoundly affected the higher-school system of Central Europe and of Scandinavia. But this insistence on the idea of a broad general education, on the idea of "allgemeine Bildung," leads to perils of its own. Speaking at the Conference on Secondary Education in Berlin, in December, 1890, Dr. Kruse, of Danzig, said that what the Prussian Gymnasien mostly needed was "less routine, less drive, less examination," (weniger Schablone, weniger Zwang, und weniger Prüferei), and his hearers applauded his words. Not that the Prussian secondary schools suffer more from examinations than do many of our own. The prevalence of examinations is far from being a necessary mark of a good system of education. In his report to the Schools Inquiry Commission, Mr. Matthew Arnold quoted some words of M. Laboulaye's, which have a very wide application:—"Le pays à examens est précisément celui dans lequel on ne travaille pas." It is on the kind of examination, not on the fact of examination, that everything turns. Tests are necessary, and tests must be sufficiently independent, but they are mischievous in so far as they fail to take into account the normal process of daily school work, and merely encourage cram and then reward it. Of this kind of offence, the German examinations cannot be pronounced as guilty as some of our own.* It is rather in the exacting character of the demands which the German secondary school tends to make on every side of the pupil's work that the danger lies. But on a point like this, a foreign observer is driven to rely on the judgment of competent critics who have watched the operations of the German schools as only Germans can.

Writing in 1881,† Dr. Rümelin, of Tübingen, maintained that, within his recollection, there had been a falling off in the really educational value of the training given by the classical schools. He traced this to the attempt to teach too much, to initiate the pupils into too many branches of knowledge, each worthy in itself, but encyclopædic in their aggregate. The requirement of so wide a range of knowledge had produced the effect, he thought, of over-burthening the memory of the scholars. The teachers had clung to the old forms of intellectual discipline, *e.g.*, grammatical accuracy in composition and translation from the classics, mathematical exercises, etc., but had superadded to these much additional instruction in the facts of classical antiquity, in history and in a number of other subjects. The effect of this, he maintained, had been to pitch a

* As to the effect of the multiplicity of external examinations on the intellectual work of some English secondary schools at the present time, see Dr. Gow's paper on "Professional Examinations" in Mr. Cookson's *Essays on Secondary Education* (1898), pp. 253 seq.

† *Reden und Aufsätze* (Neue Folge), Freiburg i. B. (J. C. B. Mohr), pp. 540 seq., and 565.

standard beyond the powers of the average pupil. There was no leisure time left for private studies and reasonable recreation. Even the cleverest boys were often sent up to the University stale (lernmüde) and overtaught. And he challenged, as one of the root errors of the system, the theory that the classical secondary school ought to aim at giving a quintessence of general education, a clear and well-knit knowledge of all the essential elements of liberal culture. The philologists, he thought, had ridden their hobbies too hard. What was once a pleasant occupation of leisure, had grown into a burthen too heavy to be borne. History, archæology, pure scholarship, had increased their claim on the boys' strength and time, until much of the bracing and appetising effect of a good education had been impaired or lost altogether. Dr. Rümelin also deplored any attempt to introduce into the regular curriculum of the classical school two modern languages in addition to Latin and Greek.* "It is excessive," he wrote, "to make the study of four foreign tongues an integral part of a scheme of secondary education. A hundred years ago, a man who knew four languages besides his own was regarded as eminently learned. There was little Greek done in those days, and English was hardly studied in comparison with French. But the talents and the strength of memory of human beings do not wax from one century to another, and the educational aim of linguistic discipline can be sufficiently attained by the use of one or two foreign tongues. To increase their number in the curriculum may do more harm than good, and simply confuse the mind."

Dr. Rümelin remarked in conclusion: "There are two distinct and alternative principles in education, the one tends to promote individuality of development, the other to secure a high average level of culture. The first system prevails in the secondary schools in England, where not only is no single institution like any other, but also within one and the same school, and in a single class of one school, the individual scholars are given different occupations according to their different gifts, attainments and future needs." As the antithesis to this system, he names the French, adding that the German stands between the two, but much nearer to the French than to the English. In fact, the developments in German secondary education, which he regretted, had all been in the direction of restricting the opportunities for free individual development among the scholars. He contrasted the new state of things with that which he remembered in his own school time. In the old days there was much more freedom, much less "drive," less actual teaching, more scope for private study. Among the naturally clever scholars this system excited the appetite for learning more; the backward or lazy boys learnt less than they are obliged to do now. "There was less compulsion: the whole business was slacker and more easy-going; but the present system, like a sort of

* It will be seen that this part of his criticism does not affect the normal curriculum of the Prussian Gymnasien.

military service, constantly hustles the lad forward and drives him up to the extreme limit of his ability and endurance."*

This was written in 1881. Dr. Rümelin was referring perhaps to other parts of Germany rather than to Prussia. And much has since been done to lessen the burthen of the secondary schools. The Prussian Lehrpläne of 1891, for example, reduced the aggregate number of weekly lessons in the *whole* curriculum of the Gymnasium by 16, in the Realgymnasium by 21, and in the Oberrealschule by 18. Nevertheless, Professor Paulsen, in the second edition of his *History of Higher Education in Germany*, which was only published in 1897, states in the strongest terms that to his mind the problem of over-pressure remains unsolved. And he traces the mischief to the number of different subjects in which the pupil in a classical school is required to attain a qualifying measure of actual knowledge. "Our Gymnasium," he says, "tries to do two things: to cleave to the old tradition of classical training and at the same time to cultivate modern languages and natural science."

To this he traces the prolongation of the school course, the prevalence of the system of having special teachers for special subjects (as distinguished from the system of one class teacher taking a group of subjects), and the heavy burden of written exercises and prepared work. "Every year the pupil must com-"plete the appointed tale of exercises in seven or eight distinct "subjects or else lose his promotion. The result of this is the "feeling of tension which people call 'over-pressure,' an evil "which has not been abolished and cannot be argued away. The "mischief is as old as the constitution of our existing system of "classical schools. It arose in Prussia when Joh. Schulze carried "out the great educational reforms," (Schulze followed Süvern in 1818 as Director of Prussian Secondary Education), "and in "Austria a little later under Bonitz; it survived Wiese's efforts "to cure it by concentrating the subjects of instruction; again, in "the eighties it gave rise to the extreme pressure which wrung "from the Kaiser himself those bitter complaints and attacks at "the Conference of 1890. I do not believe that the reforms of "1891 have healed the mischief. Nor do I believe that the mis-"chief can be healed by any mechanical reduction in the number "of working hours or by a mere lessening of school tasks in this "and that subject, especially in the classics. It seems to me that

* Cp. Dr. Virchow's remarks at the Conference on Secondary Education, held in Berlin in December, 1890. "I regret that I cannot bear my testimony to our having made progress in forming the character of pupils in our schools. When I look back over the forty years during which I have been Professor and Examiner—a period during which I have been brought in contact not only with physicians and scientific investigators, but also with many other types of men —I cannot say that I have the impression that we have made material advances in training up men with strength of character. On the contrary, I fear that we are on a downward path. The number of 'characters' becomes smaller. And this is connected with the shrinkage in private and individual work done during a lad's school life. For it is only by means of independent work that the pupil learns to hold his own against external difficulties, and to find in his own strength, in his own nature, in his own being, the means of resisting such difficulties and of prevailing over them." (*Verhandlungen über Fragen des höheren Unterrichts*, Berlin, 1891, p. 120).

"people generally have handled this question in too mechanical a "fashion. They make calculations and demonstrate by statistical "inquiries that a scholar in one of the higher classes of these "schools has never more than two or three or at most four hours' "home work. They say that this is not too much; that in old "days boys worked much harder than that; and that sensible "parents are ready enough to complain that young folks are "spoiled nowadays by too much cockering and consideration. "The trouble, they say, does not lie in over-pressure, but in there "not being lessons enough, which leads to slackness and idleness.

"That may be true enough in certain cases. Personally, I "do not believe that at the present time the demands made on "the pupils' working powers are really excessive. But, even if "this be granted, we are not yet in a position to decide whether "over-pressure exists or not. The weariness induced by intel- "lectual labour does not merely depend on the amount of labour "which has to be expended on a given task. Ten hours walking, "which one has to do on a flat country road in order to fetch some- "thing one has forgotten, tires one far more than ten hours' walk- "ing over hill and dale, now missing and now finding the path. "Take a scholar who works twelve or even fourteen hours a day "with intense concentration of mind at some favourite study, and "give him instead a small number of comparatively easy tasks— "say three or four—each of which can be finished without much "trouble in a couple of hours; he will feel these six or eight hours "of assigned labour an insupportable burthen. Now it seems to "me that something of the same kind has happened to our secon- "dary schools in the present century. In the room of relatively "free, self-chosen and connected work in one department of learn- "ing—*i.e.*, in classical antiquity—they have been given assigned "and compulsory tasks in a variety of subjects. A hundred years "ago, schoolboys perhaps worked harder than they do to-day, "though it may be that the day's labour did not really as often "begin before sunrise as the recollections of some old public school "heroes may have led us to believe. And yet the boy of an older "generation may have found his longer hours of work less tiring "than the lad of to-day finds his four set tasks which he can finish "comfortably in three hours . . . There are certain tempera- "ments with which the present system thoroughly agrees: steady "conscientious young fellows whom it just suits to prepare the "task set them day by day, and day by day to have it taken by "the master and approved. But lads of an independent character "soon get sick of that kind of compulsory routine. . . . This "is the real cause of the feeling of over-pressure. It is a state of "mind induced by staleness more than by any absolute excess of "school work. . . . The fact is that, in the case of the average "schoolboy, we cannot get a double result—the old kind of classi- "cal education and the modern scientific education too. We need "a type of school more adapted to the present time, a modern "Gymnasium."*

And, in the concluding pages of his book, Professor Paulsen traces the trouble still further home. He find its real root in

* Paulsen. *Geschichte des gelehrten Unterrichts*, vol. ii., 636-643.

the dominant idea of "allgemeine Bildung," in the conception of a formula for "a good general education." "For the last "hundred years," he says, "this conception of 'allgemeine "Bildung' has tyrannised over us with an ever-increasing "tyranny. It dominates our curricula; it dominates our ex- "aminations; this and that is a necessary ingredient 'in a good "education,' and must therefore be taught in the schools, or else "the pupil will afterwards have a right to reproach the school "with having neglected its duty. And this pressure of public "opinion has translated itself more and more into the pressure of "official rules. The State makes the secondary schools, and the "State must therefore see to it that a good general education can "actually be got in them. And it must also see to it that civil "servants of all grades are really 'well educated men.' This is "the object of the curriculum of the classical school, this is the "reason why special teachers in all manner of subjects are "appointed to its staff; this is the reason why the examinations "are so arranged. The 'good general education' which a youth "is to get at a classical school, must be blamelessly thorough and "complete."*

But it must be added, in order to prevent possible misunderstanding, that the view so admirably stated by Prof. Paulsen contains some of the elements of controversy. That there is over-pressure in the Prussian secondary schools at all, or that, if any cause for anxiety does exist, it is due to the reasons adduced by Professor Paulsen, is by no means generally admitted by Prussian secondary teachers and educational authorities. We sometimes read in this country brilliant onslaughts upon our system of prevalent examinations, and we willingly admit the force and truth of much that is urged against certain aspects of this branch of our educational arrangements. But, at the same time, most people make the private reservation that, after all, some system of authoritative tests is necessary in educational work, and that what is really wanted is, not the abolition of examinations root and branch, but rather the co-ordination of those tests, their better adjustment to the normal course of school duties, and the taking into account of what a boy does in class day by day besides what he can pour out on paper on a given day. In a word, educational controversies of this kind are generally found to turn on questions of method and degree. And similarly I am disposed to say that Professor Paulsen's criticisms will be found to touch the exaggerated use which has been made of the idea of a "good general education," rather than the idea of there being such a thing as a good general education at all. It would indeed lead us into a position of great difficulty if we were to admit that secondary education is a vague process, the intellectual aim of which cannot be more or less accurately defined. It is imprudent to enter into or to carry on any practical business without a definite aim, and to do so in such a costly thing as secondary education would expose us to special dangers of extravagance

* Paulsen. *Geschichte des gelehrten Unterrichts*, vol. ii., p. 684.

and administrative confusion. What, therefore, is necessary, if Professor Paulsen's trenchant criticisms are allowed to be true, is, not to abandon the notion of "allgemeine Bildung" altogether; but, to reconsider the formula of its ingredient parts, and to strike out from it any details which can be safely discarded.

The difficulty, however, does not end here. A certain perplexity of purpose is the doom of all higher education at the present time. We are passing through a period of transition. So many new subjects and new ideas are crowding in for recognition as parts of school curricula, that it is impossible to make room for them all in any single scheme. And we know by experience that subjects which look at first sight eminently suitable for educational purposes, do not always prove so excellent when the first flush of enthusiasm has faded, when a mass of detail has covered up the sharp outlines of the early generalisations, and when the "crammer" has perfected his short cuts to apparent knowledge. This disillusionising experience strengthens the instinctive feeling that we shall do wisely if we hold fast to methods of intellectual discipline which, however old-fashioned and apparently useless from a practical point of view, do at least possess the solid merit of being effective for their purpose. It takes a long time to forge a first-rate educational instrument. Such a thing is not to be had for the mere asking. We are apt to forget that some apparently simple educational devices are simple because generations of skilled teachers have slowly stripped away from them all that is unessential and otiose. And thus we come to value, more than we once thought possible, old methods of traditional education and cling to them as at any rate an essential part of our scheme. But other subjects still make an irresistible claim for admission, and thus, in spite of all efforts to the contrary, the curriculum grows and grows until it is in danger of breaking down by its own weight. And, more than that, the balance of the curriculum is spoiled. Yet balance is essential to its effect and beauty, as in the case of any other work of art. Just as in some villages we may sometimes see old cottages, the design of which shows that the tradition of architectural style lingered on unconsciously in unfrequented places long after, in centres of more enlightenment, it had given way before the inevitable rush of new and discordant ideas: so in education there is often more truly artistic feeling, more unity and balance and a better distribution of values in curricula which are mere sleepy survivals of the past than in those which have been laid open to the distracting influences of the present day. The latter often halt between two opinions. But this is inevitable. We may deplore it, but it is part of the trouble of our time.

There remains, however, a graver matter still. The trend of things during the last three or four generations has been towards introducing what we may call the factory system into intellectual, as well as into industrial, work. In all branches of intellectual labour the individual and independent workman counts

for less than he did. This is part of the great change, of which the so-called Industrial Revolution is only one aspect. In the old days, higher education quickly led a man into spheres of freedom and independent activity. It is not so now.* He finds himself with his intellectual aptitudes just a screw in the machine. He has to know a great deal more than his forefathers, not for the mere pleasure of knowing, but because the knowledge is an indispensable qualification for his work. The standard has risen. Higher education has become, for an increasing number of people, a necessity of life, not a luxury of culture. And it is of no use for us to turn round and say that we will have none of it, but will shuffle along comfortably in our old path. We must accept the situation. We must play the game according to the new rules, or else stand out altogether. And standing out means national ruin. A nation which refuses to equip itself with the necessary knowledge does so at its peril, for its rivals are getting it and using it. We may grumble at the high standard of intellectual attainment forced on the pupils in the German secondary schools if we like. There are Germans who grumble too. We may say, if we like, that the former state of things was happier after all. There are Germans who say so too. But the unconscious trend of things goes on all the same, and has no regard for protest or regrets.

All that we can do is to keep such freedom as we can, remembering always that initiative *plus* knowledge is the most valuable combination of all: that, in the long run, nothing makes up for the loss of initiative; and that for no Empire in the world is the production of individual initiative and of a sense of personal responsibility more important than for our own. We may try to get more unity of curriculum, more precision of aim, more balance of studies. It is still more important, however, to shield, as best we may, the scholars from overstrain, from premature fatigue of mind, from loss of freshness of interest and power. But all this, in the case of lads who have to earn their own living, and to make their own way in the world, has to be done subject to the imperative condition of their obtaining and retaining the necessary minimum of actual knowledge.†

* Cp. Paulsen. *Geschichte des gelehrten Unterrichts* (ii., 667). "Es ist wohl kein Zweifel dass die geistige Selbstandigkeit der Gebildeten am Ende des 18 Jahrhunderts sehr viel grösser war, als am Ende des 19 Jahrhunderts."

† It is in respect of the need for laying stress on knowledge as well as on energy that I chiefly differ from the conclusions reached by M. Edmond Demolins, in his vigorous book *A quoi tient la supériorité des Anglo-Saxons*. (Paris, Maison Didot.) He attempts a comparison between the French, German and English systems of secondary education, believing that the question of education is pre-eminently *the* question of the social future. In a chapter on the "Régime Scolaire Anglais," he thus defines the chief educational aim. "Ce besoin, c'est essentiellement de fabriquer des jeunes gens aptes à se tirer eux-mêmes d'affaire dans toutes les difficultés et dans toutes les situations de la vie; c'est de faire des hommes pratiques et énergetiques, et non des fonctionnaires ou de purs lettrés, qui connaissent de la vie seulement ce que l'on apprend dans les livres, ce qui, à vrai dire, est peu de chose. Le produit que les Anglais veulent obtenir est bien celui qui répond le mieux aux conditions inéluctables de l'évolution sociale actuelle; des hommes." I agree that initiative and energy are matters of essential importance, but the energy must not be blind energy, nor must the initiative fail to be informed by accurate knowledge and directed by forethought. The conditions of modern life are making necessary skilful combinations of individual courage and intellectual attainment. The problem is, how to secure the due balance, in groups and in individuals, of those two characteristics.

XVI.—Experimental Combinations of Classical and Non-Classical Curricula in Prussian Secondary Schools.

These are the grave questions which are troubling German secondary education. They are among the underlying causes of educational unrest there as here. And one of their effects is to threaten, even in Prussia, the rigid classification of secondary schools. "Der Begriff," says Professor Paulsen, "liebt reine Formen, die Wirklichkeit dagegen fordert mannigfache Übergangsformen." Neat and orderly classifications are the delight of the philosopher, but the nature of things demands a variety of transitional forms. And among the most remarkable signs of change in Prussian secondary education is the tendency to favour combinations of curricula in order to meet, with the economy of a single institution, a variety of local needs. Let it be said at once, however, that composite arrangements of this kind are a very different thing when they are consciously designed and scientifically watched as duly authorised experimental deviations from a normal pattern, from what they are when they are allowed to grow up casually and anyhow, without any conscious reference to underlying principle and without any care being taken to arrange the conditions, and to record the outcome, of each permitted experiment.

There are three different schemes to which attention must be called in this connection. The first is that adopted, by official authority, in the Realgymnasium at Altona; the second is that introduced into the Municipal Gymnasium and Realgymnasium at Frankfort-on-the-Main; the third is that proposed for the re-modelling of the curriculum in the upper classes of certain Oberrealschulen, but not yet actually carried into effect.*

(1) The Realgymnasium at Altona is combined with a Realschule. In other words, from a basis of common classes in which no classics are taught, there rises a school in two parallel divisions; the one retaining Latin as the dominant form of its linguistic discipline, the other seeking the correspondent discipline in the study of English and French. The Director of the school is Dr. Ernst Schlee, an eminent teacher whose name is honoured in educational circles throughout Germany. It is to him, more than to any man, that the experiment at Altona owes its existence and success. He is a teacher of rare power, a man of deep enthusiasm for educational work, a thinker as well as an administrator. Those, who, like the present writer, have seen him with his highest class (his "upper sixth" as we should call it in an English public school) realise the influence which he exerts over his pupils by the earnestness of his character, by the love for classical literature which possesses him, by his intensity of moral purpose. The school at Altona was founded in 1871,

* The tendency towards combination of curricula is, however, showing itself in actual changes in the sphere of the non-classical schools. Since March, 1895, the Realschule at Cuxhaven (in the territory of Hamburg), has had a Latin "side" (Latein-Abteilungen). The boys on the classical side are taught with those on the non-classical, in all subjects where this is possible.

and Dr. Schlee was its first headmaster. It had been the intention of the Municipality to establish a Realgymnasium (or Realschule erster Ordnung as it was then called), and the equipment of the school was designed for that end. But, though the Municipality wanted the privileges of a "Realschule of the first rank," it also decided to give modern languages a dominant place in the curriculum in view of the commercial needs of so large a centre of the shipping industries and of seaborne trade.* The two aims were difficult to reconcile. The normal course of the "Realschule of the first rank" began with Latin in the lowest class, entered by boys of nine years of age. The Municipality wanted the stress from the first to be laid on modern languages. The Education Department was ready to make some concessions (the conciliatory Dr. Wiese was then Director of Secondary Education), but felt unable to go so far as the Municipality of Altona desired. The result was that the school was established as a "Realschule of the second rank"—*i.e.*, without Latin at all. But many parents in the town were gravely inconvenienced by this decision. The Civil Service and higher technical studies were closed to scholars from Realschulen of the second rank. In order to qualify for any of these callings, a lad would have had to be sent to the Altona Gymnasium (founded in 1738) in order to get Latin, although the whole curriculum of the Gymnasium was otherwise unsuited for his special needs. And again, in order to get the certificate for one year's military service, boys were required to stay at a "Realschule of the second rank" for seven years, instead of for six as was the case at schools of a higher grade.

Now, it so happened that in 1865 Ostendorf, the headmaster of the Realgymnasium at Lippstadt, had publicly declared that from year to year he was more definitely inclining in favour of beginning the *systematic* study of foreign languages, not with Latin, but with some modern tongue; and that, through this educational reform, itself, (as he thought), pedagogically wise, means might be found of unifying the earlier stages of different types of secondary education. The lad destined for commerce needed modern languages; the lad destined for academic studies and professional life must needs go through the classical training. Instead of these two roads of education parting from the first, he conceived the idea of their following a common route up to a certain point. In short, Ostendorf was feeling his way to the postponement of the time at which the study of Latin begins in a fully classical education.

* Altona, though conterminous on one side with Hamburg, is under quite distinct municipal government. It is in Prussia, and not in the territory of Hamburg at all. Yet, as the traveller passes along the crowded thoroughfare which leads from Hamburg to Altona, only a column marks the boundary between the one city and the other. Manchester and Salford are not more closely contiguous. Altona, itself a large place (population about 150,000), is inhabited by a poorer population than Hamburg (population about 600,000). But, like Hamburg, it is mainly dependent on shipping and other allied trades. The educational provision of the two cities is quite distinct. That of Hamburg, a free city, has a marked traditional character of its own. Altona is part of the Prussian system. But local needs have been fully recognised by the Prussian Education Department in the modifications permitted in the curriculum of the Realgymnasium there.

Dr. Schlee heard of this, when in 1870 he was chosen headmaster of the new "modern" school then in course of erection for the Municipality of Altona; he consulted on the subject Dr. Wiese in the Education Department at Berlin. Subsequently, on Dr. Wiese's advice, he visited Lippstadt, thus coming under the personal influence of Ostendorf himself.* After considering the various bearings of the question, Dr. Schlee thought he saw his way, if he could obtain sanction for a new curriculum, to meet the special needs of Altona, while at the same time getting the school recognised as a "Realschule of the first rank," with all the attendant privileges and advantages which that would imply. Accordingly, in September, 1871, he submitted to the Board of Inspectors (Schulkollegium) of the Province a scheme for putting off Latin to the third (year's) class from the bottom, *i.e.*, for the postponement of the beginning of the study of Latin to the age of 12, and for giving in the two lowest classes a great deal of time (six and eight hours a week respectively) to French. English was to begin in the class above that in which Latin would be commenced. Dr. Schlee had little doubt that this plan, possibly with minor alterations, would commend itself to Dr. Wiese at headquarters. But the scheme had to go through the Board of Inspectors for the Province. The then Head Inspector of the Province frankly opposed the plan. He said that it was wrong to learn the daughter before the mother—*i.e.*, French before Latin. But he consented to raise no objections to the experiment if the Education Department itself was willing that it should be tried. So far the obstacles seemed to be falling away before Dr. Schlee's energetic efforts. But an insuperable difficulty arose in an unexpected quarter. The Municipal Education Committee objected to the proposed change. Their objections were not pedagogical in the strict sense, nor financial, but of a more personal character. And the difficulty was the harder to overcome, because at the time Dr. Schlee had neither seat nor vote (as he has now) on the Municipal Education Committee.

So the school was opened as a "Realschule of the second rank," without any Latin teaching. Things went on, as they had begun, until the summer of 1876. Then the father of one of the scholars called on Dr. Schlee and bitterly complained of the grievance involved by the absence of Latin from the curriculum. Dr. Schlee explained the difficulties to him and pointed out that, if a number of the citizens agreed in regarding the then arrangements as unsuitable, they had the means of pressing their views on the Municipal Education Committee. The parent vigorously took up the idea, and in August, 1876, a petition, signed by 37 leading citizens, was presented to the Municipal Education Committee of Altona, praying that the school might be converted into a "Realschule of the first rank" by the necessary changes

* Cp. *Die Geschichte des Altonaers Realgymnasiums in den ersten* 25 *Jahren seines Bestehens.* (Festschrift zur Feier am 20 April, 1896), von Dr. Ernst Schlee. (Altona, P. Meyer's Buchdruckerei.) Ostendorf's most important *published* works appeared after the establishment of the Altona School, viz., *Volksschule, Bürgerschule, und höhere Schule* (Düsseldorf, 1872), and *Mit welcher Sprache beginnt zweckmässigerweise der fremdsprachliche Unterricht?* (Düsseldorf, 1873.)

in the curriculum. The memorial is well written, and to an English reader is specially interesting, as showing how necessarily well acquainted a German parent is with the regulations and privileges of the various types of secondary schools. In the following October, the Committee referred the petition to Dr. Schlee for his observations. Dr. Schlee re-stated his case, and with some minor changes, repeated the recommendations which he had made five years before. The Committee approved the scheme, and recommended the City Council to adopt it. In January, 1877, the City Council did so, on condition that the Education Department would recognise the school as a "Realschule of the first rank," and that the adoption of the plan entailed no increase in the Municipal estimates for its maintenance. In the meantime Dr. Schlee had been, in his Christmas holidays, to Berlin, and had seen Drs. Bonitz and Gandtner at the Education Department. Both showed warm sympathy with the proposals, and as the new Provincial Inspector was not unfavourable to the scheme, Dr. Schlee felt confident of success. The next step was that, in February, 1877, the Board of Inspectors referred the plan to the Municipal Education Board at Altona, with a recommendation that it should be adopted.

In the following June the Education Department authorised the trial of the experiment, on condition, however, (1) that the hours which it was proposed to assign to Latin, were increased in number; (2) that the salaries of the teachers were augmented by the Municipality of Altona by the addition of a lodging allowance (in accordance with the regulations as to the stipends of teachers in Realschulen of the first rank); and (3) that the Municipality should provide as soon as possible a suitable building for gymnastic exercises in the winter months. The Municipal Education Committee raised no difficulty about the proposed increase in the hours to be devoted to Latin. The point about the room for physical exercises was got over by hiring a gymnasium from the local athletic association. The question, however, of augmenting the salaries of the teachers proved a more formidable difficulty. Negotiations ensued between the Municipality and the Education Department. Finally a compromise was reached, and in April, 1878, the revised curriculum of the school was approved by the Minister. Thus, with the beginning of the summer half-year (April, 1878), the new scheme began to operate, or one year and nine months after the aggrieved parent had began to collect signatures for his petition.

I have gone into these details, not as being important in themselves, but because they give a concrete illustration of the way in which the Prussian system actually works. It will be noticed how thoroughly at every point the wide issues, involved in the proposed change in the curriculum, were examined and discussed; with what searching care new schemes are canvassed and criticised; how the advocates of reform are compelled to think out the full bearing of their proposals; how closely interlocked is the whole system of municipal initiative, provincial inspection, central control, and local expenditure. The four factors have

each their due weight in the result. It takes a long time, but it is not necessarily, after all, a long way round to an important end. Once approved, the new scheme has all the help that skilled advice, careful record and scientific comparison of results can supply. The significance of the new departure was at once recognised all over Germany. Municipal authorities sent for reports of the school. Headmasters from other schools at a distance came to examine the actual working of the scheme. Inquiries came even from Hungary, Rumania and Russia—so close a connexion is there between the educational movements in Continental countries. In 1880, the town of Essen established a school on the same plan. In 1882 the name of "Realschulen of the 1st rank" was changed into that of Realgymnasien. Güstrow, in Mecklenburg, followed Altona's example in 1885; the great Guerikeschule, in Magdeburg, in 1887. Then came the Conference on Secondary Education at Berlin in 1890. The Conference approved the trial of the Altona system where local needs rendered it desirable. The Lehrpläne, of 1891, contained a similar recommendation. In 1892, the Realgymnasium at Iserlohn was remodelled on the Altona plan. Eleven other Realgymnasien or Realprogymnasien have also adopted similar arrangements.*

The curriculum of the Altona "Realgymnasium and Realschule" (it enjoys the double title) is as follows. I have prefixed to it the curriculum of the preparatory department also. It will be understood that boys enter the Realgymnasium and Realschule proper when they are nine years of age. Into the question of the educational results reached in the school I hope to enter in another paper at a later time. It must here suffice to say that, in the couple of days which I passed in the school in the autumn of 1897, I was much pleased with what I saw.

TIME-TABLE OF THE MUNICIPAL REALGYMNASIUM AND REALSCHULE AT ALTONA, WITH THE PREPARATORY DEPARTMENT.†

[TABLE OF WEEKLY NUMBER OF LESSONS IN SCHOOL.]

PREPARATORY DEPARTMENT.

	Class 3.	Class 2.	Class 1.
Biblical History	2	3	3
Object Lessons	2	2	2
Mother Tongue	10	6	7
Writing		3	3
Arithmetic	4	4	5
Singing	–	1	1
Physical Exercises	–	1	1
TOTAL	18	20	22

* Dr. Schlee's article on *Reformschule und Realschule* in the *Zeitschrift für lateinlose höhere Schulen*. (Feb., 1897.)

† From the *Jahresbericht des Realgymnasiums und der Realschule, zu Altona über das Schuljahr Ostern*, 1896 *bis Ostern*, 1897, erstattet von dem. Direktor, Dr. E. Schlee. (Altona: druck von P. Meyer.)

UPPER SCHOOL.

	NAME OF CLASS.											
				Realschule.			Realgymnasium.					
	VI.	V.	IV.	III.	II.	I.	III^2.	III^1.	II^2.	II^1.	I^2.	I^1.
Religious Instruction	3	2	2	2	2	2	2	2	2	2	2	2
Mother Tongue	4	3	3	3	3	3	2	2	3	3	3	3
Latin	–	–	–	–	–	–	6	6	5	5	5	5
French	6	6	5	6	6	5	4	4	4	4	4	4
English	–	–	4	5	4	5	3	3	3	3	3	3
History and Geography	3	3	4	4	4	3	4	3	3	3	3	3
Arithmetic and Mathematics	5	5	6	6	5	5	5	4	5	4	5	5
Physics	–	–	–	–	2	3	–	2	2	3	2	2
Chemistry	–	–	–	–	–	2	–	–	–	2	2	2
Natural History	2	2	2	2	2	–	2	2	2	–	–	–
Writing	2	2	(1)	(1)	–	–	(1)	–	–	–	–	–
Physical Exercises	3	3	3	3	3	3	3	3	3	3	3	3
Drawing	–	2	2	2	2	2	2	2	2	2	2	2
Singing	2	2	–	–	–	–	–	–	–	–	–	–
TOTAL	30	30	31	33	33	33	33	33	34	34	34	34
Spanish (optional)	–	–	–	–	2	2	–	–	–	–	–	–

(2) The Gymnasium (classical school) at Frankfort-on-the-Main has a curriculum so framed that its three lowest (years') classes form a common foundation for the classical school and for a non-classical school (lateinlose Realschule). The Realgymnasium (semi-classical school) provides, like that at Altona, in its three lowest classes a common foundation for the semi-classical and the non-classical school. But the time-table of the three lowest classes in the municipal Realgymnasium at Frankfort is not the same as that of the corresponding classes at Altona. Furthermore, at Frankfort, the three lowest classes in the Gymnasium and the Realgymnasium are the same. Thus from a three-layered bottom storey there rise at Frankfort two parallel divisions (but not under the same headmaster), the one fully classical, the other semi-classical in curriculum; and there might rise a third division, parallel to the other two, but non-classical in curriculum.

In other words, this arrangement is an attempt to unify the three types of secondary school—classical, semi-classical and non-classical—for a period co-extensive with the first three years of school life (9—12). It involves the postponement of Latin to a point three years later than that at which the study of it normally begins in the classical and semi-classical schools of Prussia. It also involves for the Gymnasium a further deviation from the normal type, in that it postpones the beginning of Greek to a point two years later than that at which it is regularly

begun in the Prussian secondary schools of that type; and for the Realgymnasium a corresponding postponement of the beginning of English. French, on the other hand, is begun two years earlier than in the normal programme of each of these two types of schools. Other changes will be observed if the following curricula of the Frankfort schools are compared with those printed in the "Curricula and Programme of Work for Higher Schools in Prussia."

THE FRANKFORT CURRICULA.
(Plan of lessons in School per week.)

	Common Foundation of Non-classical Education.			(Alternatives)											
				Gymnasium. (Classical School.)						Real Gymnasium. (Semi-Classical School.)					
	VI.	V.	IV.	III.^{b}	III.^{a}	II.^{b}	II.^{a}	I.^{b}	I.^{a}	III.^{b}	III.^{a}	II.^{b}	II.^{a}	I.^{b}	I.^{a}
Religious Instruction	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mother Tongue and Historical Narration	5	4	4	3	3	3	3	3	3	3	3	3	3	3	3
Latin	–	–	–	10	10	8	8	8	8	8	8	6	6	6	6
Greek	–	–	–	–	–	8	8	8	8	–	–	–	–	–	–
French	6	6	6	2	2	2	2	2	2	4	4	3	3	3	3
English	–	–	–	–	–	–	–	–	–	–	–	6	4	4	4
History and Geography	2 Geo.	2 Geo.	5	3	3	2	2	2	3	3	3	3	3	3	3
Arithmetic and Mathematics	5	5	5	4	4	3	4	4	3	4	4	4	5	5	5
Natural History	2	2	2	2	–	–	–	–	–	2	2	–	–	–	–
Physics	–	–	–	–	2	2	2	2	2	–	–	3	2	2	2
Chemistry	–	–	–	–	–	–	–	–	–	–	–	–	2	2	2
Writing	2	2	–	–	–	–	–	–	–	–	–	–	–	–	–
Drawing	–	2	2	2	2	–	–	–	–	2	2	2	2	2	2
TOTAL	25	26	26	28	28	30	31	31	31	28	28	32	32	32	32

Physical exercises in all classes: 3 hours a week.
Singing " " : various.
Optional instruction in Drawing (Gymnasium) II. and I.: 2 hours a week.
" " English " II.^{a} and I.^{b} " "
" " Hebrew " " " "

This is a very important experiment. It is as if Rugby or Marlborough were to have made an almost revolutionary change in their curricula. The Municipal Gymnasium at Frankfort is a famous school, and Dr. Reinhardt is a famous headmaster. He is one of the most eminent teachers in Germany, and universally recognised as a leader of educational thought. It is not too much to say that every educational expert in Prussia (and there are many such) is watching the progress of this experiment at Frankfort with unfeigned interest, and some of them perhaps with dismay.†

For a great deal depends on the result—nothing less perhaps than the future development of classical education in Germany. Let us not forget that in Scandinavia (a part of the world which many progressive educators in Germany regard as a sort of

* *Die Frankfurter Lehrpläne mit einer Einleitung*, herausgegeben von Dr. Karl Reinhardt, Direktor des städtischen Gymnasiums zu Frankfurt a/M. Frankfurt-am-Main. M. Diesterweg, 1892.)

† An account of some of the teaching in this school will be found in Mr. Fabian Ware's paper in this volume. Cp. also Oberbürgermeister Fuss' description of his visit to the Gymnasium and Realgymnasium at Frankfurt, in his Report to the Magistracy of Kiel (reprinted in the *Zeitschrift für lateinlose höheren Schulen*, November, 1896).

laboratory for educational experiments), the old form of classical education is hard pressed for life. Is the advance of the modern spirit, the accumulation of new studies, the pressure of commercial ambition, going to bleed the old classical training to death in other countries also? Dr. Reinhardt thinks that classical education is passing through a crisis of its fate. By that he means, not so much that the world's interest in Greek and Roman antiquity is at all likely to disappear, but that the particular form of secondary education which is embodied in the curriculum of the German Gymnasium does stand in considerable peril. At present things may look on the surface smooth enough. The Gymnasium enjoys social prestige, official privilege, public honour, and the loyal support of its friends. In Prussia there are more boys in the Gymnasien than in all the other kinds of secondary schools put together. There are far more Gymnasien in Prussia than there are of any other single type of secondary school. Again, speaking broadly, the Gymnasien have the pick of the boys.* Anyone who has handled a class knows what that means. It means that more can be done with the boys, that they are quicker to take a point, quicker to trace a connection, readier to learn, more accessible to ideas; better material, in a word, for the instruments of higher education to work upon. All this implies the primacy of the Gymnasium, and the primacy of the Gymnasium implies the primacy of the classical education.

But the classical education, as it exists to-day in the Prussian Gymnasium, is an elaborate compound. It is not the classical education of the Renaissance, of the old Saxon boarding school of Winchester before the Public Schools Commission, or even of the classical side of a great English Public School to-day.† It is more composite, more eclectic. It has compromised with the modern spirit. And, in compromising, it has lost some of its unity of intellectual purpose. Then again it has on paper a nine-years' course. The curriculum is planned on the understanding that the boys will complete it. But most of them do not. At the end of the sixth year they can get their certificate for one year's military service, and, having got it, large numbers go away. In other words, they had come to the Gymnasium because their parents believed it to be the best school, but not because they had any very definite belief in the special virtues of the complete curriculum. The old Hellenic enthusiasm which inspired Winckelmann and Schiller and hundreds of the cultivated men who came under their influence, has faded away. The curriculum of the Gymnasium does not stand for any rising form of intense belief. But it has a great

* There are, of course, exceptions to this.

† In this connexion, it may be remarked that the classical lessons in a good school are made incidentally the means of interesting the boys in a wide range of other subjects. A term's work on the 2nd or 6th or 7th Book of Thucydides, for example, involves a great deal more than a careful study of the Greek text. The German classical secondary schools give much less time to composition in Latin and Greek than do the English, as they have given up Latin and Greek verse-making and Greek Prose. Latin Prose composition is also in a rather precarious position.

tradition of excellence; the old methods have been tested and found effective; and the classical education, among all the swelling controversies of the day, is a sort of neutral ground.

Yet this is not a sure foundation for a great scheme of education. There is a feeling abroad that the classical training exists as it were on sufferance. It may remain until something else is ready to take its place. And, all the time, the leaders of non-classical education are sharpening their weapons and improving their methods and producing their astonishing results. Germany, too, is becoming very much interested in trade and commerce. It has long had an intellectual and scientific interest in geography, but its interest is quickly becoming very practical also. Wealth and commerce count for more than they did; the learned professions are very full; young men have to wait for years before they can get masterships, in some subjects at any rate, at the public schools. What wonder then that parents should think oftener than they did of the wisdom of putting their lads into trade? And when they once make up their mind to do this, they naturally cast about for the kind of education which will best enable their boys to succeed in commerce and industry. The Realschulen and the Oberrealschulen are ready to their hand. Or, to put it the other way, a parent may hope to bring up his lad to a profession. But to enter the higher professions, the boy must go to a Gymnasium. He must begin his work at the Gymnasium when he is nine years old and complete the whole nine years' course. But what if the lad turns out, half way, or a third of the way, through that course, hardly fitted to excel in the kind of intellectual work that a profession involves? What if he proves dull at his books, slow at his classics, "ballast" in short? To remove him to an Oberrealschule or a Realschule means that he will find himself behind his contemporaries in French and other "modern" subjects. He will have to make up lost ground by private lessons and "coaching" or else remain permanently behind. The parent thinks of all this and wonders whether he dare send his boy to a Gymnasium when the risk is so great. What an advantage it would be to him if the lowest classes of all three types of secondary schools were interchangeable, so to speak; and if he could put off making up his mind about the lad's probable future until the boy was at any rate twelve years old and likely to be showing some clearer signs, if not of actual preference for a particular calling, at least of aptitude for one group of studies more than for another.

It is to meet this natural desire—a desire all the stronger and more general in Germany, where the choice of school is involved in the choice of a profession, more than it is in England, that Dr. Reinhardt has carried through his plan at Frankfort. The decisive age in the boy's life is deferred till twelve, and that gives the father three more years to make up his mind in.

But there is a further reason still. The great reformers of secondary education in Prussia planted classical schools in all the chief and middling-sized towns of the country. For a time, these were the sole secondary schools. Then came the up-growth

of new educational demands; the gradual recognition of new types of curriculum; the slow extension of some of the privileges to other forms of school. The great towns, where the new industrial and commercial needs were at first most keenly felt, managed with more or less difficulty to set up and maintain alternative schools with the various curricula approved by the State. But gradually the small towns became anxious to share in the advantages of the new forms of "modern" education. Questions of expense at once proved more serious, and it might happen that there were not boys enough in the neighbourhood to keep so many different schools going, at least with the numbers of scholars necessary to their success and to the due replenishment of the higher classes. Thus there naturally arose the desire for the economical combination of different types of school in one institution. In order to maintain a very high standard of characteristic excellence in each form of secondary school, the Prussian Government has never welcomed or encouraged any intermixture of types of school. It does not like educational hybrids, believing them to be, at least when they are hybrids between different species, comparatively sterile in intellectual influence.*

Dr. Reinhardt has set himself the task, with the approval of his Municipality and of the Government itself, of working out a form of combination which, if successful, would solve many difficulties for large and small towns alike. He very truly says that merely to carry on two practically separate schools in one building is not to make one united whole. *Die Einheit einer Schule wird nicht durch das Gebäude bestimmt.*† And this remark is of course much truer of a day school than it would be of a boarding school, and much truer again of a day school in a country of the day-school tradition than it would necessarily be of a day-school in a country where the boarding-school tradition of out-of-school *esprit de corps* affects, in a measure, the practice and arrangements of the day-schools of the same grade. Of the worst form of the day-school system, where the school tends to become a knowledge factory, Dr. Reinhardt's remark would be absolutely true. To the worst form of the boarding-school system, where the work in the class-rooms matters very little at all, it would be practically inappropriate. But he is thinking of the average German secondary school, where the intellectual unity of the institution is a matter of supreme educational moment, and he means to lay stress on the essential fact that a school ought to be, in a sense, a living thing; an institution dominated by a single ideal, standing for one special form of culture and developing that form with all the force of concentrated purpose at its command.

* Cp. the words used at the Berlin Conference on Secondary Education in December, 1890, by Dr. Holzmüller of Hagen, a protagonist in the cause of non-classical education. "Eine Schule kann nicht 'Mädchen für alles' sein. Sie muss ein ordentliches klares Ziel haben" (a school cannot be a maid of all work. It must have a precise and clear aim). *Verhandlungen über Fragen des höheren Unterrichts* (1891), p. 123.

† *Die Umgestaltung des höheren Schulwesens.* Vortrag von Dr. Karl Reinhardt. (Frankfurt am Main, M. Diesterweg, 1892.)

Dr. Reinhardt also holds strong opinions as to the importance of beginning linguistic studies with some tongue less remote from a small boy's knowledge than Latin can ever be. In the old days—and to a much later date than is generally realised—Latin was practically taught in schools as a living language.* It is natural for young children to learn languages primarily by the ear. Some would maintain that to be the only rational way of learning the natural rhythm and feeling of a language at all. This, however, is a subject of educational controversy, and there are many who hold (paradox as it may appear at first sight) that for certain purposes of intellectual discipline a language is all the better for being dead; that the ear, except for the necessary function of audience, is a dangerous instrument to use in the delicate business of training the logical faculty by means of Latin grammar, parsing, construing, and composition; that the ratiocinative powers ought not to be given, at any rate in the first years of their sterner training, the demoralising assistance of the acoustically imitative; that Latin, as a formative weapon for the improvement of the understanding, is to be likened to mathematics rather than to French; that the special virtue of the often doleful early years of classical training lies in its abstracting language from the adventitious attractions of spoken rhythm, and in using the parts of speech bleached into a condition handier for purposes of logic; that the state of mind in which a boy should be led to approach the task of classical composition is wholly different from that half-instinctive, half-animal state in which a man feels his way into the right cadence and idiom of a living tongue.† I do not know how far Dr. Reinhardt would go in

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* Locke. *Some Thoughts concerning Education* (pp. 514-517), 1690, advises that Latin be taught to a pupil (1) after he has learnt to speak and read French well; (2) by someone always talking to him in Latin.

"If a man could be got who himself speaking good Latin would always be about your son, talk constantly to him, and suffer him to speak or read nothing else, this will be the true and genuine way."

Of course, it was much easier to follow this advice in Locke's time than it would be now. Dr. William Harvey (1578-1657), the discoverer of the circulation of the blood, "had acquired such a perfect colloquial knowledge of Latin that he thought with equal facility in Latin or in English, so that it was immaterial into which language he put his ideas." (Mr. D'Arcy Power's life of Harvey. Fisher Unwin, 1897. p. 56.) John Wesley spoke Latin when he went to Germany in 1738 and to Holland in 1783. (Wesley's Journal, vol. i. 104 and iv. 245.)

The practice lingered in Germany to a much later date. Mr. Matthew Arnold, visiting the Friedrichs-Wilhelm Gymnasium at Berlin, in 1865, heard the headmaster, Dr. Ranke, give a lesson to the highest class on the *Philoctetes* of Sophocles. "He spoke Latin to his class, and his class spoke Latin in answer; this is still a common practice in the German schools, though not so common as formerly. The German boys have certainly acquired through this practice a surprising command of Latin." (Schools Inquiry Commission Report, 1868, vol. vi., p. 583.)

† Cp. Mr. Lyttelton's chapter on Classical Teaching in Mr. Barnett's *Teaching and Organisation* (Longmans, 1897), pp. 214, *seq.*

"Cannot something be done towards suggesting a true and intelligible reason for boys to work at classics, even though nine-tenths of them are never to be scholars? Putting it quite briefly, the learning of these ancient languages in its earliest stages affords an opportunity for training in precision of thought, memory, inference, and accuracy; in its later stages it is capable of enriching the mind with noble ideas. The aim of the school is, therefore, to instruct till the ages of sixteen or seventeen in such a way as to secure

making concessions to those who are attempting to revive the use of conversational exercises as an introduction to the study of classical languages. It is possible that he might feel, as many do, the danger of such devices: he might urge that those who adopt them are confounding two wholly different forms of intellectual discipline; and that, if you are going to teach a spoken language at all, it is far better to choose French or German, about the right pronunciation of which there is no dispute, than Latin, as to the pronunciation of which, in English secondary schools, there is no sort of uniformity of practice; and also that, as all natural conversation must turn, in its earlier stages at any rate, on the ordinary objects and relations of daily life—furniture, meals, methods of communication, and so forth—it is wiser to choose a language which reflects the present conditions of civilised existence than one which at every turn would compel the teacher to digress into an archæological commentary, into what the Latin Primer calls "a prefatory excursion." But in any case Dr. Reinhardt stoutly maintains that the natural road to Latin is through French, through the nearer thing to the thing more distant. And as against those who hold that, in order to become "a real scholar" it is necessary that a boy be broken in early to the practice of his craft, and that those precious years between 9 and 12, if once lost, can never be made up for again, he would reply that, in the field of pure scholarship itself, he undertakes to produce as good results as the champions of the earlier commencement of the language. He might indeed possibly go so far as to urge that a turn for scholarship is a matter much more of temperament and natural aptitude than of early school training. Certainly such a view would be the more consonant with much that we all recognise to be the actual effects, so far as a love for classical scholarship is concerned, on the majority of men who have served the old term of long apprenticeship to Greek and Latin letters

It may be remarked here that English schoolmasters are not fully agreed as to the wisdom of beginning with French as the first modern language. Some maintain that, for English boys it is better to begin with German. Again, it is sometimes implied that if a boy destined for business learns French or German, in-

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the earlier benefits, if boys leave then, while gradually paving the way for the later benefits, in case the study continues to the University. . . . The failure to stimulate love of literature by means of Latin and Greek has been to some extent compensated for by the *admirable tonic virtue which resides in these languages owing to the fact that they are no longer spoken as they have been written.* It cannot be denied that in even the early stages of translation into Latin from English, the pupil constantly has to think deeply into the meaning of an expression, for which in French or German he would find in the dictionary an almost exact equivalent. This characteristic, combined with others more generally recognised, has enabled the study of Latin to survive the heavy assaults of the last half-century. People go on defending it as though it could turn business men into *littérateurs;* it can do, and has done, nothing of the kind, but *it is an unrivalled instrument for stimulating the reasoning faculties at an age in which their very existence might seem open to doubt.*" Mr. Lyttelton also states it as being the "*main principle, that in the learning of an unspoken language a special virtue resides.*"

stead of Latin, at school he will necessarily kill two birds with one stone, and, at the end of his course, find that he has not only derived more educational advantage from his linguistic studies but that he has acquired the knowledge of a language which will be directly useful to him in his trade. But in some trades a knowledge of a foreign language is said to be of little or no practical use at all. In others, French or German are of little value as compared with Spanish. On these points Mr. J. E. King, High Master of the Manchester Grammar School, has recently written as follows:—

"The main part of grammar school education is, as it always has been, the study of language, 'the liberal science or art of grammar, the ground and fountain of all the other liberal arts and sciences which surge and spring out of the same,' as an old founder expresses it. This is the chief instrument of instruction and means of mental discipline. On a modern side this training must be derived from the modern languages, and then a question arises as to which language or languages shall be chosen. It may seem obvious to reply French or German, but if the end in view is commercial utility, the answer is not always clear. I have, for instance, been told by parents that Italian and Spanish are commercially the most important foreign languages. On the other hand, I have been told with equal confidence that German is the one thing needful. All depends upon the trade in which the speakers are engaged. Again, it is only in a few towns that any foreign language is of real practical importance. In some towns of Lancashire French and German would be considered of no greater utility than Latin and Greek. From an educational point of view there is no doubt that for boys who know no Latin, German is the best language as a first step. It is more akin to English, its sounds are comparatively easy for English tongues, and it has a more obvious accidence. French is an unsatisfactory language for an English boy to begin with. A clever boy can make progress, but the average boy seems to find French too impalpable; the distinctions of sound are too fine, the grammatical idioms too subtle. Better progress is made afterwards with French, if a boy begins his study of foreign languages through German." *

(3.) Of the third movement—that for the remodelling of the curriculum in the highest classes of the Oberrealschule (non-classical school with a nine years' course)—there is less that is explicit to be said. The scheme is still *in nubibus*, in the stage of debate among teachers concerned. Nevertheless, it raises issues so important as to call for mention here.

The non-classical schools (the Realschulen and the Oberrealschulen) are a very striking product of modern German education. They have aimed high, and have already done a great work. Their distinguishing characteristic is the use that they make of living languages as instruments in linguistic discipline and in liberal culture. The new methods of modern-language teaching which, though they owe a great deal to the labours of English and French scholars, have been most highly elaborated in Germany, and there also most widely diffused, amount to little short of an educational revolution. Just as deaf-mutes are now being taught to speak by seeing how their teachers speak and to read the speech of others by observing the movement of the vocal organs and of the lips, so are thousands of boys and girls

* In Mr. Cookson's *Essays on Secondary Education* (1898), p. 20.

in modern secondary schools being trained to regard modern languages not as collections of literary mosaic, to be ingeniously fitted together into correct patterns by means of grammars, vocabularies, and carefully memorised rules, but as living things, things which cannot be understood unless they are felt to be living, communicated as living, and caught from living lips accustomed to their true use, and trained in their right utterance and native rhythm. The boys in the modern language classes of an old fashioned secondary school were often, so far as the actual use and pronounciation of the language went, little better than "children of silence." The methods used, and doubtless rightly used, in teaching Latin or Greek had been carried over mechanically into the teaching of English, French, or German. It was as if the methods of geometry had been imported into the teaching of biology. Not that the object of a good secondary school is merely to produce couriers or commercial travellers of the shallower kind. Its aim is a liberal education, without which the mere possession of imitative dexterity in picking up the sounds of a strange language will be found of little permanent value. It is in the firm but fitting discipline of the mind and body, in the training of the will, in the tempering of the mind, in the sharpening of the powers of accurate observation in strengthening the memory, in the zymotic power of great ideas, in the purging and deepening of belief, that the real and only virtue of education lies. It is not cram, but discipline. But when we come to choose the instruments of education, our choice is a wide one. It is indeed possible that one instrument may not in itself be better than the others; but it is certain that all are not equally fitting for all temperaments, or for all stages of culture, or for the producing of all the different aptitudes needed in different lines of life. In the choice of the right instrument or instruments for the given child, the given school, the given district, and the given calling, lies the central problem of educational work. The champions of the Realschulen are convinced that, for modern life, modern languages are an essential (not necessarily, however, the only essential) instrument in linguistic discipline. They are far from disparaging the discipline of science or the discipline of mathematics, but they maintain that, for children of school age—up to 16 at all events—the linguistic discipline in its wider sense ought to be the backbone of education. They contend that the laws of mental growth, the need for initiating each new generation into the accumulated stores of human culture as expressed in language and literature of all kinds, and the fact that books are cheaper than laboratories, will compel us to make use of the linguistic discipline as our mainstay during the earlier stages of liberal education—with due admixture of mathematical training, of the *inventive* side of science teaching, of manual exercise, of general information about the world at large and the things in it, along with the training of the body in the healthy and noble exercise of its varied powers. But they are fully alive to the fact that, for the very reason that the modern languages

are living, it is incumbent on the non-classical schools to lay special stress on grammatical exercises, and on the accurate and laborious study of inflexion and of syntax, wherein lies the mental gymnastic, the logical training, of linguistic study.*

Whether or no living tongues will prove as effective as dead ones in securing these benefits, time alone can show. Already, however, the Realschulen have produced astonishing results,† which have a commercial bearing apart altogether from their more strictly educational interest. And the new methods are already beginning to tell on modern language teaching in the classical schools. In September, 1897, my friend, Professor Dr. Wegehaupt, Headmaster of the Wilhelms Gymnasium at Hamburg, kindly allowed me to be present at a lesson in English given to the second highest class in his school—as we should say, to his "lower sixth." I may remark in passing that at Hamburg commercial and other reasons have caused much attention to be paid to the teaching of English in all grades of schools, and that even in all the elementary schools our language is taught in the four highest classes.‡ On the occasion of my visit to the Wilhelms Gymnasium at Hamburg, the boys in Unterprima were using a school edition of Sir W. Besant's *London, Past and Present*. The lesson was almost wholly given in English. The teacher was a German. The boys began by briefly summarising in English the substance of the part of the book which they had already read. This was done with closed books, and proved an excellent exercise in pronunciation, and in the accurate formation of sentences. Next the books were opened, and each boy in turn read aloud in English, and then translated into German, a fairly long passage from the pages which had been brought up prepared. The translation into German was almost faultless. Then I asked leave to choose a passage for them, in order that I might test their power of dealing with an entirely unprepared piece taken at sight. I

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* Cp. Dr. Matthias. *Die Gleichwertigkeit der Oberrealschul-und Gymnasialbildung. Zeitschrift für lateinlose höhere Schulen*, December, 1897.

"Deshalb soll sich der französische Anfangsunterricht hüten den Sprechübungen zu breiten Raum zu gestatten, seine Methode soll nicht zur Methode *du perroquet* zur Papageienmethode werden, die Geistesbildung nur wenig im Gefolge hat und die stellenweise mehr physische als psychische Unterlage und Wert zu haben pflegt, da sie den Nachahmungstrieb, aber nicht angestrengte Denkthätigkeit zur Voraussetzung hat. Die begrifflich-gesetzliche Seite muss im französischen Unterricht auf lateinlosen Schulen weit mehr gepflegt werden als an Lateinschulen, wo das Latein das Seinige thut."

† Cp. article on *The Realschulen in Berlin, and their bearing on Questions of Secondary and Commercial Education.* "Special Report on Educational Subjects, 1896-7," pp. 375, *seq.* and 397.

‡ In Prussia, no foreign language is taught in the elementary schools (Volksschulen), strictly so called. But a foreign language forms part of the curriculum of the Mittelschulen (Higher Grade Schools, as we may call them). Hamburg has an educational system of its own, but the ordinances of the Reichs-Schul Kommission have necessarily great influence upon the curricula, etc., of its secondary schools. The Reichs-Schul Kommission consists of six members, of whom Prussia, Bavaria, the Kingdom of Saxony and Württemberg nominate one each. The fifth member is nominated by Baden, Hessen, Elsass-Lothringen and Mecklenburg-Schwerin in turn. The sixth member is nominated in turn by the other States in the German Empire in their order. The Reichs-Schul Kommission has its office and meets in Berlin.

happened to light on a by no means easy chapter. Each boy in turn read a few sentences aloud in English and then translated it into German with hardly any hesitation. Their knowledge of our vocabulary was wide. In order to test them still further, I gave them a short address on some historical points which arose out of the chapter taken at sight. They understood me perfectly, and afterwards acquitted themselves most creditably in English conversation. Now, these boys began English a little more than two years before my visit. They have devoted to English only two hours a week out of thirty hours a week of their school time. The bulk of their work is classical, *i.e.*, half of their hours of weekly work are given to Latin and Greek. They are, in other words, doing classical work, more or less on the level of the Lower Sixth Form at an English Public School. They are well advanced in mathematics, and in history and geography. They give two hours a week to natural science; three hours a week to German literature; two to religious knowledge. Moreover, they had learnt French for six years, and, at the time of my visit, were still giving two hours a week to that subject. When, therefore, on the top of all this, we find them enjoying such facility in English as to be able to read with pleasure a rather difficult book at sight, to understand a short English lecture, and to converse readily in English on various subjects, there is reason to be struck at the high and wide range of the boys' attainments. It is also sufficiently clear that a first rate classical education does not necessarily disqualify a boy from gaining, while still at school, a most enviable proficiency in two living languages, besides keeping up his Latin and Greek and other subjects. On the contrary, many experienced teachers are strongly of opinion that early drill in Latin and Greek grammar helps a boy at every turn in acquiring a grip over a new language. But, of course, the methods appropriate to instruction in a dead language are very different from those most suitable for instruction in a living one.

There is a considerable body of opinion that in spite of all that has been done and is being done for the improvement of methods of modern language teaching, nothing will be found to supersede, as an instrument of linguistic discipline for the sharpening of the logical faculties, the *right and skilful use of Latin*. Those who hold this view are careful not to defend a good deal of the customary teaching of Latin grammar, as when, for example, in Mr. Jowett's words, "it is droned out by third-rate schoolmasters to third-rate minds."* They speak, not of the kind of instruction which produces *stupor pedagogicus*, but of the classical discipline at its best. Perhaps the truth is that it depends on a boy's natural temperament which kind of early intellectual discipline is likely to be best for him. Those who have had to do with the teaching of little boys, at the age when in England they usually begin Latin, are aware that there is an extraordinary range of difference between them not only in the degree but in the character of their

* Royal Commission on Scientific Instruction and the advancement of Science, 1872, vol. i., Q. 3917 *seq.*

aptitudes. For some little boys with rather stupid, heavy minds, no one would willingly prescribe an early course of Latin. On the other hand, boys of a volatile, imaginative temperament may easily be overstimulated by teaching which is just sufficient to arouse the intellectual interest of their less intelligent comrades. For these rather precocious boys, who are apt to develope interests above their age, there is often good reason for thinking that no mental discipline is better than the old drill in Latin Grammar and in the initial stages of the manufacture of Latin elegiacs. A good deal of sympathy has been wasted over the alleged sufferings of little boys put early to the Latin Grammar. Under good brisk teaching it is not unusual to see a class of little boys as keen over a grammar lesson as they are over a game of cricket.

In any case, there are signs that, though "modern" education may make extensive conquests in certain grades of secondary schools, it is far from likely to prevail over the finer forms of the old training in all. At the Conference on Secondary Education, held in Berlin in December, 1890, Dr. von Helmholtz drew the following comparison between the old classical education as he remembered it in his school days and that prevailing in Prussia to-day:—"I have got the further impression that, in the rather distant epoch to which my own school memories go back, we left school with more pleasure in classical literature than is the case with the youths of the present generation. . . . It has recently struck me that the state of things, with which I became acquainted under the influence of the methods of our older schools, is much better maintained even at the present day by young Englishmen than it is in our own country. The English schools, it is true, devote an extraordinary amount of time to the ancient classics, preferably however to a wide range of classical reading, in which purely grammatical studies are reduced to a minimum. And among educated Englishmen, who have had a classical education at their schools and Universities, one finds a very thorough and extensive knowledge of classical antiquity (*sehr eingehende und vielfache Kenntniss des klassischen Alterthums*). They are always ready to appeal to the classical writers and to quote from them. And—what in my judgment is the chief point—you may notice a very distinct difference in the English style of those Englishmen who have been educated in this way and of those who have been trained in other methods. Educated Englishmen write, as a general rule, a very good style, and I must say that my young English pupils are better at composition than their German contemporaries."*

I do not cite this (perhaps too flattering) passage as typical of the opinions which prevail in educational circles in Prussia. German educational authorities would, I fear, be far from generally concurring with Dr. von Helmholtz in this matter. It is indeed somewhat humiliating to an English reader of the proceedings at the Berlin Conference to notice how little weight was

* *Verhandlungen über Fragen des höheren Unterrichts* (Berlin, 1891), p. 206.

attached to the results of English secondary education. And we cannot console ourselves with the thought that this was due to universal ignorance of our arrangements, difficult as it is for a foreigner (and, for that matter, for an Englishman) to get a comprehensive knowledge of our system on all its sides. I am much more inclined to ascribe it to an instinctive feeling that the German and the English systems are in a sense incomparable; that the two nations aim at different things; and that the dominant practice in the best secondary schools in the two countries is so diverse alike in method and in principle as to render anything short of a systematic comparison somewhat misleading. For this reason, German educators abstain, as a rule, from drawing casual illustrations from English schools, though there is a growing tendency among them to regard the English system of secondary education as deserving of careful study and investigation. The more the subject is looked into, the more suggestive appears the contrast between the systems prevailing in the two countries. And it is obvious that a comparison of the actual results attained by different courses of education, extending over the same term of years and applied to boys drawn from the corresponding ranks of ability in the two countries, is highly expedient in the public interest, and not less likely to be interesting than are comparative inquiries into the methods and results of naval and military organisation.

Nevertheless it is fair to quote Dr. von Helmholtz's remarks as showing that there are many eminent educational authorities in Germany who maintain the view that a special virtue resides in the old tradition of classical training. And there are signs that this view may gain, instead of losing, adherents among the men of the younger generation. It will be remembered that the first form of "modern" secondary education recognised in Prussia as worthy of a place in the hierarchy of the higher schools was that which discards Greek but retains Latin. This type of education is represented by the Realgymnasium. In a sense, it is a reversion to the old Latin training (filled out, of course, with many new elements of instruction) which prevailed in the local grammar schools before the wave of neo-Hellenic enthusiasm brought the study of Greek into so high a place in the curriculum of the classical schools of Prussia. It is true that the Conference on Secondary Education in 1890 showed scant honour to this form of semi-classical training. It scorned it as nothing much better than a merely temporary compromise, and even went so far as to deny it a place in the ideal organisation of secondary schools in the future.* But, for all that, the Realgymnasium shows a certain tenacity of life, and its curriculum clearly corresponds to a distinct class of needs. A remarkable proof of this may be found in the fact that those German schools, which are engaged in the special task of educating boys destined to be officers in the Army, have the curriculum of the

* *Verhandlungen über Fragen des höheren Unterrichts* (Berlin, 1891), p. 795.

Realgymnasium.* The course of study provided by the Realgymnasien is strenuously defended by Professor Paulsen in the new edition of his "History of Higher Education in Germany" (ii. pp. 611 seq.) And in a remarkable, though perhaps hardly dispassionately worded, memorial recently issued by the Professors of the Technical High School at Karlsruhe, the systematic study of Latin, as a school discipline, is declared to be of the highest value for future engineers, botanists, zoologists, mineralogists, chemists, and physicists. The memorialists indeed advocate the study both of Greek and Latin at schools, in the case of boys intending to follow any of the above scientific pursuits, but of the two ancient languages they emphasise Latin as the more indispensable.†

But perhaps the most striking of all recent protests in favour of the retention of Latin and Greek as the mainstay of secondary education is that made by Monsieur Jaurès, the Socialist leader, in the French Chamber in November, 1896. He spoke against giving equal recognition to the classical and modern sides in secondary schools on the ground that, in the headlong competitive struggle of the present time, the sterner mental discipline afforded by Latin and Greek will give way before what Americans would call "soft options" in school curricula, unless a premium is set on the former. He pleaded for the preservation, at least until some happier time should relieve society from its present distress, of classical studies as a memento of disinterested culture. Otherwise even the field of education would be submerged under the rising tide of commercialism. And he urged that it was the duty of the middle classes, with however wry a face, to hand on for the benefit of a future generation the tradition of disinterested studies, "like a blind man charged with the duty of handing on a torch."

It must be borne in mind that in the German educational system certain important privileges are confined to the classical and semi-classical schools. Latin and Greek together (and, in a much lower degree, Latin alone) thus enjoy a kind of favouring protection by the State.‡ And these languages have the further

* The Kadettencorps (which is the name technically given to the whole of this class of military schools) provides, for the sons of officers and of others attached to the State service, the means of education with a special view to their preparation for military life. Its fundamental object is to be a nursery (Pflanz-schule) of officers for the army. It is in two divisions. The first comprises schools at Coslin, Potsdam, Wahlstatt, Bensberg, Plön, Oranienstein, and Karlsruhe for boys from ten to fifteen years of age. These schools have the curriculum of the corresponding classes in a Realgymnasium. As many as 1,470 boys are being educated as cadets in these schools. The second division is formed by the Haupt-Kadetten-Anstalt at Gross-Lichterfelde, for boys between fifteen and eighteen. The curriculum of this institution is that of the upper classes of a Realgymnasium, with a special highest class (Selekta). There are 1,000 cadets in the school at Gross-Lichterfelde. These schools are boarding-schools, with some day pupils. (Statistisches Jahrbuch der höheren Schulen, 1895-6. 1,182 *seq.*)

† *Das Gutachten der Technischen Hochschule in Karlsruhe uber die Oberrealschulen*, reprinted in the *Zeitschrift für lateinlose höheren Schulen*, February, 1897, with caustic comments by Prof. Dr. Holzmüller, the editor of that magazine.

‡ The privileges are well summarised by Oberbürgermeister Fuss in his report to the Town Council of Kiel (1896). The Gymnasium alone is able to entitle a youth to proceed to the study of Jurisprudence, Medicine, Theology, and Classical Philology at the University. It enjoys all the other privileges accorded to other types of secondary school. The Realgymnasium has the advantage over the

benefit of a certain social prestige. There still lingers in the world the feeling which is expressed in Locke's words: "Latin I look upon as absolutely necessary to a gentleman." All these factors undoubtedly help the classics to retain their honourable place in higher education. Nevertheless there are educational reasons in their favour also. And there are traces of a reaction in some quarters against the new idea that they can be dispensed with altogether, without injury to the value of the curriculum, in certain types of secondary school. The Realschulen and the Oberrealschulen, with their respective courses of six and nine years, are without either Latin or Greek. The Realgymnasium, though it dispenses with Greek altogether, begins Latin in the lowest class, and continues it throughout the curriculum. The experiment at Altona, which has been imitated elsewhere, is a hybrid between Realschule and Realgymnasium, as in the three first years of his school life a boy there does not learn Latin. Similarly at Frankfurt-am-Main, in the municipal Gymnasium and Realgymnasium the first three years are bare of Latin. In so far as either of these types of Reform school prevail over the Oberrealschulen, *i.e.*, are substituted for them in the case of new foundations or in the reconstitution of existing non-classical schools, it is clear that the advance of purely Latin-less secondary education meets with a check.* At Kiel, for example, it was proposed to convert an Oberrealschule into a Reform school on the plan of the Frankfurt municipal Realgymnasium. The main reason why Oberbürgermeister Fuss recommended the change was his conviction, after carefully observing the results of the historical and German lessons in the two highest forms of the Kiel Oberrealschule, that the pupils were at a disadvantage through not having had the discipline of Latin teaching. A poll was taken at Kiel, among the parents of the scholars in the Oberrealschule, whether they would allow their boys to learn Latin if optional instruction in that language were provided by the

Oberrealschule in being able to entitle a youth to proceed to the study of modern languages at the University, and to become an officer in the Army or Navy. The Oberrealschule can entitle a youth to study Mathematics or Natural Science at the University, and to enter the upper grades of the public service as an architect, mechanical or mining engineer, or in the departments of Forestry or of Posts and Telegraphs. The Realschule (six years' course), can entitle a youth to enter the lower grades of public service in the law, railways, provincial governments, administration of mining, smelting, and salt works, the higher Agricultural Colleges, the Royal Colleges of Music and of Plastic Art, the higher Horticultural Colleges, and (on presentation of a further certificate attesting his proficiency in Latin), the profession of chemist. All the above grades of school offer their scholars the opportunity of obtaining the certificate for one year's military service. It will be observed that the Gymnasien, Realgymnasien, and Oberrealschulen (respectively, the classical, semi-classical, and non-classical schools with a nine years' course), are appropriate to the preparation for different professions. The Realschulen are specially suited to, but by no means exclusively attended by, those who are destined for commercial life and for responsible, though generally subordinate, positions in industry. It will be observed that the Prussian secondary school system is an integral part of the national organisation of professional and civil service life. The public service in Prussia embraces a much wider variety of occupation than it does in this country.

* Cp. Prof. Dr. Holzmüller's article on *Die Umwandlung der Oberrealschule zu Kiel und das Gutachten des Herrn Oberbürgermeisters Fuss* in the *Zeitschrift für lateinlose höheren Schulen*, November, 1896.

municipal authorities. Out of 140 parents, to whom the question was sent, 60 answered in the affirmative. This shows how strong the desire is, whether on practical or on educational grounds, to have Latin taught in some of the nine-year schools which are at present non-classical. The issue is so grave and far reaching that Dr. Holzmüller, who speaks with pre-eminent authority on behalf of the advocates of the Oberrealschulen, has recorded his belief that a general tendency to introduce Latin into the Oberrealschulen, in order to qualify boys for the privileges attaching to Realgymnasien, would be "the hardest blow that the cause of non-classical secondary education could sustain."

It is beyond all question, that the non-classical schools with a six years' course (Realschulen) have successfully met an urgent educational need. But the matter is somewhat different when we come to consider the work of the three highest (years') classes in the non-classical schools with a nine years' course (Oberrealschulen). It is in these schools that the non-classical training makes its most thoroughgoing claim to providing a liberal education in the highest sense. There is no doubt that most praiseworthy efforts have been made to think out their curriculum, to connect their studies, and to raise the standard of their work to a high level of excellence. But there are many Germans who, while friendly to the non-classical movement as a whole, doubt the wisdom of trying to extend it *at present* to the *higher* grades of secondary education. They believe that for the kind of boys who take a complete secondary school course of nine years, Latin is still a professional, if not a social, necessity. In the future, things may (they admit) be otherwise. But, as a transitional arangement, they hold that the Realgymnasium will for a long time to come hold its own against the Oberrealschule. Nevertheless they would gladly dispense with any artificial protection of Latin. And there are also many among the most enthusiastic supporters of the fully classical education, who are foremost in urging that the gymnasium needs, and ought to have, no privileges which are denied to the semi-classical or non-classical secondary schools *with an equal length of course*. So sure are they of the intrinsic merits of the fully classical education for the most gifted boys, that all they ask is a fair field and no favour. At present they are favoured and the other schools are handicapped.

But the questions raised by a scheme of non-classical (higher) secondary education strike deep. Is it possible for a man to be counted well-educated who has made no study of the history, literature, philosophy and art of Greece and Rome? There is, I am inclined to believe, a growing feeling among the advocates of Oberrealschulen that some acquaintance with the works and meaning of classical antiquity is a necessary element in a liberal education. "Die Gegenwart ist eine mächtige Göttin." So also for that matter is "Die Vergangenheit eine mächtige Göttin" too. Without some knowledge of the ancient world, it is hard for a man to get historical perspective, a real grasp of the significance of mediæval and modern culture, a sense of proportion in his judg-

ment as to the relative value of modern civilisation. Everyone, it has been said, is disposed to overvalue the particular kind of education from which he has himself derived benefit. But it is a wise kind of loyalty to hold firm by the proved excellence of old ways, and, when every allowance has been made for bias and conservative preference, there is surely much to be said for the view that it is well for a man to have been trained to some general knowledge of the significance of early Egyptian culture, of the Lydian and Persian monarchies, of Marathon, of the Sicilian Expedition, of the Attic Drama, of Plato and Aristotle, of the campaigns of Alexander the Great, of the struggle between Rome and Carthage, and between Rome and Macedon, of Julius Cæsar's military writings, of the fall of the Roman Republic and the rise of the Empire, of Virgil and Horace, of the condition of the world at the time of the birth of Christ, and of the extension of Roman citizenship to the provinces of the Empire, not to speak of the transference of the seat of government to Byzantium, of the barbarian inroads, and of the Institutes of Justinian. These things are not matters of merely professional or antiquarian interest. Some knowledge of them (I am not meaning expert knowledge) is surely a necessary factor in any wider form of political judgment.* We hear less than we did of the old cry

"Qui nous délivrera des Grecs et des Romains?"

"Expel Greek and Latin from your schools," wrote Dr. Arnold, "and you confine the views of the existing generation to themselves and their immediate predecessors; you will cut off so many centuries of the world's experience, and place us in the same state as if the human race had first come into existence in the year 1500 . . . Aristotle and Plato, and Thucydides, and Cicero, and Tacitus are most untruly called ancient writers. They are virtually our own countrymen and contemporaries, but have the advantage which is enjoyed by intelligent travellers, that their observation has been exercised in a field out of the reach of common men."†

But to say this is not to make an exclusive claim for classical history and literature as the sole factors in a liberal secondary education. It is rather to maintain that they cannot be left out without injuring the true unity of the best training. Thus we reach the point at which the humanities in their widest sense

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* It must be admitted, however, that the ordinary classical training at English schools and Universities does not cover as wide a range as this. But there is no reason why it should fail to do so. The late Master of Trinity College, Cambridge, during the proceedings of the Public Schools Commission of 1864, made some interesting suggestions as to the influence of classical education on English political ideas in the 17th and 18th centuries. There is something to be said for the view that the tenacity of the classical studies in our chief secondary schools is not, as some have maintained, due to unreasoning conservatism, but has a special fitness in view of the Imperial work to which many of the scholars will be called. A recent German writer, Dr. Matthias, Director of the Gymnasium at Düsseldorf, in speaking of the British Empire, refers to "der politisch-geschulte Charakter dieses nun einmal doch welt beherrschenden Volkes, das dem Römervolke so ähnlich ist auf dem Gebiete des staatlichen Wirkens und Schaffens."

† Quoted in Sir J. Fitch's Thomas and Matthew Arnold (Heinemann, 1897), p. 35.

and the study of the phenomena and the laws of nature are seen to be necessary parts of the circle of culture. "The ideal," said Mr. Matthew Arnold, "of a general, liberal training is to carry us to a knowledge of ourselves and the world. We are called to this knowledge by special aptitudes which are born with us; the grand thing in teaching is to have faith that some aptitudes of this kind everyone has. This one's special aptitudes are for knowing men—the study of the humanities; that one's special aptitudes are for knowing the world—the study of nature. The circle comprehends both, and we should all have some notion, at any rate, of the whole circle of knowledge. The rejection of the humanities by the realists, the rejection of the study of nature by the humanists, are alike ignorant. He whose aptitudes carry him to the study of nature should have some notion of the humanities; he whose aptitudes carry him to the humanities should have some notion of the phenomena and laws of nature. . . . The prime and direct aim of instruction is to enable a man to know himself and the world. Such knowledge is the only sure basis for action, and this basis it is the true aim and office of instruction to supply. To know himself, a man must know the capabilities and performances of the human spirit; and the value of the humanities, of *Alterthumswissenschaft*, the science of antiquity, is that it affords for this purpose an unsurpassed source of light and stimulus. Whoever seeks help for knowing himself from knowing the capabilities and performance of the human spirit will nowhere find a more fruitful object of study than in the achievements of Greece in literature and the arts during the two centuries from the birth of Simonides to the death of Plato. And these two centuries are but the flowering point of a long period, during the whole of which the ancient world offers, to the student of the capabilities and performance of the human spirit, lessons of capital importance. This the humanists have perceived, and the truth of this perception of theirs is the stronghold of their position. It is a vital and formative knowledge to know the most powerful manifestations of the human spirit's activity, for the knowledge of them greatly feeds and quickens our own activity; and they are very imperfectly known without knowing ancient Greece and Rome. But it is also a vital and formative knowledge to know the world, the laws which govern nature and man as a part of nature. This the realists have perceived, and the truth of this perception, too, is inexpugnable. . . . The great and complete spirits which have all the aptitudes for both roads of knowledge are rare. But much more might be done on both roads by the same mind, if instruction clearly grasped the idea of the entire system of aptitudes for which it has to provide; of their correlation, and of their *equipollency*, so to speak, as all leading, if rightly employed, to vital knowledge; and if then, having grasped this idea, it provided for them. . . . As our public instruction gets a clearer view of its own functions, of the relations of the human spirit to knowledge, and of the entire circle of knowledge, it will certainly more learn to awaken in its pupils

an interest in that entire circle, and less allow them to remain total strangers to any part of it. Still, the circle is so vast and human faculties so limited, that it is for the most part through a single aptitude or group of aptitudes that each individual will really get his access to intellectual life and vital knowledge; and it is by effectually directing these aptitudes on definite points of the circle, that he will really obtain his comprehension of the whole."*

But in planning any scheme of school studies, time is of the essence of the contract. It is here therefore that the science of adjusting curricula to different forms of need reaches its highest point of skill. And it is on this subject that some of the finest brains in Germany have concentrated their thought. It is clear that the non-classical school must, for the chief part of its work, draw the subject-matter of its instruction in the humanities from modern, and not from classical, history and literature. This, however, raises a number of grave difficulties to which some allusion must be made here. A school, if it is to have any real influence over the minds and character of its pupils, must have an ideal side. That is to say, there must be some clear and strongly felt purpose running through its work, dominating masters and scholars, and permeating all those parts of the curriculum which touch the imagination and form the moral judgment. If a school merely aims at imparting the dexterities which a junior clerk may find useful in a business house, it will lack the characteristics which deserve the name, and have fixed the value, of a liberal education. *Abeunt studia in mores.* The nature of a boy's studies is apt to affect his character. And, even though a school discard the teaching of more or less mechanical devices, it still may be, as one might say, crypto-commercial; that is to say, the unspoken assumption of all its work may be that the one thing worth troubling about is private gain and success in business. To start schools like this is by no means the object of the supporters of the Realschulen and Oberrealschulen of Prussia. They believe that a narrow aim of that kind stultifies itself and defeats its own object, because it discourages the quickening of those intellectual interests which, apart from their higher value, are indispensable to the best kind of commercial success. By all means, they would say, let the school turn out its boys with trained aptitude for the learning of a business, but such trained aptitude is a bye-product of a certain form of general education and mental discipline; and a course of instruction which makes commercial proficiency an end in itself tends to become sterile by cutting itself off from the sources of vitalising interest. True, the inculcation of pecuniary self-interest may be a strong purpose running through a school, but (apart from any judgment as to its moral value) it is usually disappointing even in its commercial results, because it rarely co-exists with certain other qualities of influence which are essential to the discipline of mind and character. Even therefore

* Report on Secondary Education in foreign countries to the Schools Inquiry Commission. 1866 (Report, vol. vi., pp. 592 *seq*).

on the lowest ground, which is far from being that taken by the devoted groups of teachers to be found in the Prussian Realschulen and Oberrealschulen, a high aim is specially necessary for the secondary schools which are largely attended by those destined for trade and commence. Now when the curriculum under consideration relates only to boys of from nine to sixteen years of age, the problem is comparatively simple. Within the limits of those years, we are dealing with those comparatively early stages of instruction which, at first sight at any rate, do not seem necessarily to raise difficult issues. They may raise them really, at all events the implications may be there, and implications often affect the temper and tendency of the judgment more than explicit reasonings. But the fact that so much is involved in their point of view may even escape the notice of the teachers themselves, and thus the latent difficulties of the situation may remain obscure. It is when you get to the higher grades of the teaching, to the case of intelligent boys of from sixteen to nineteen, that the problem becomes manifest. The subjects which you are bound to use for training lads of that age in the humanities involve, in any case, many questions of fundamental controversy, and, when the subject-matter of instruction is drawn from present or comparatively recent times, its controversial character is much more apparent. This is why it has often been found more convenient to abstain from teaching the more recent portions of English history in the upper forms of our secondary schools. It would be impossible to shirk the fundamental questions without greatly impairing the intellectual value of the teaching, and at the same time there is a natural and proper reluctance to raise issues about which controversy has hardly lost its fire. But in the case of a purely modern curriculum the difficulty could hardly be evaded. The classics provide a more or less neutral field, where indeed many of the issues can be discussed but without importing into them the misunderstandings almost inseparable from recent controversy. Yet even, in regard to the classical schools, one often hears surprise expressed that the boys are allowed to leave with so little knowledge of what has been the political history of their own country during the past two or three generations. Still less easy therefore would it be to avoid these subjects in the highest forms of a "modern" first-grade school. Schopenhauer indeed, in an essay on education, said that "no child under the age of fifteen should receive instruction in subjects which may possibly be the vehicle of serious error, such as philosophy, religion, or any other branch of knowledge where it is necessary to take large views, because wrong notions imbibed early can seldom be rooted out, and of all the intellectual faculties, judgment is the last to arrive at maturity." "The child," he continued, "should give its attention either to subjects where no error is possible at all, such as mathematics, or to those in which there is no particular danger in making a mistake, such as languages, natural science, history, etc."* But it is not generally agreed that history is a subject in

* "Studies in Pessimism," a series of essays by Arthur Schopenhauer, translated by T. Bailey Saunders (Sonnenschein), pp. 96-97.

which there is "no particular danger of making a mistake."§ The *hinterland* of historical teaching stretches back into the sphere of influence of ethics and religion, whence the teacher is bound to draw the criteria of moral judgment. Nor have modern nations been able to agree to any scheme of studies, even for children under fifteen, of the purely neutral character which Schopenhauer prescribes. The fact is that among the subjects most necessary to early education there are some upon which men are, and always have been, deeply divided in opinion. And even Schopenhauer's limitations, could they be accepted as they stand, do not help us when we come to the education of youths over fifteen. In fact his words emphasise the inevitably difficult character of some of the branches of school teaching which would be indispensable in the higher classes of a "modern" school. Of course, it may be said that the issues need not be raised. But to attempt that grade of education without raising the underlying issues would be like refusing to dig and trench a garden. The crop would not be good. It is not impossible that these difficulties (of which illustrations might be given as regards more than one necessary branch of the curriculum) may prevent that form of *non-classical* school, *which aims of teaching the humanities to boys of sixteen upwards*, from becoming at any early date in the future the serious rival of the corresponding first-grade classical school.* Each great movement of the human spirit in religion and philosophy has brought with it, as a natural sequel, the establishment of a new system

§ In the Report of the third annual Conference of Catholic Colleges upon Secondary Education (May, 1898), mention is made of the preparation of a Catholic text book of English History.

* In an essay on Public Morality published in his volume on *Practical Ethics* (Sonnenschein, 1898), Prof. H. Sidgwick quotes from a German writer the following phrases:—"Self regard is the appointed duty of a State; the maintenance and development of its own power and well-being—egoism, if you like to call this egoism—is the supreme principle of all politics." "The maintenance of the State justifies every sacrifice and is superior to every moral rule." Questions of political philosophy, involving, in some form or other, judgments upon the rightness or wrongness of such principles of public morality as those quoted above are almost bound to rise, or to be involved in, the teaching of history to elder pupils. Dr. Arnold himself wrote, in describing the use he made of the classical historians in the Sixth Form at Rugby, that "in short, the pupil may be furnished, as it were, with certain formulæ which shall enable him to read all history beneficially; which shall teach him what to look for in it, how to judge of it, and how to apply it." Suppose the teacher's views were those indicated in the sentences from the German writer quoted above. Their expression would seem less controversial through the non-conducting medium of remarks on Thucydides or Tacitus than in direct reference to comparatively recent European history.

The limits of the teacher's freedom become still more difficult to determine (especially in regard to economic questions) when the teaching in all the higher schools is under the direct supervision of the Government. So long as there are no serious obstacles to the opening of private schools, in which the teaching may be in accordance with the perhaps extreme views of a minority, the pressure is relieved. But if at any point the whole system of higher education passes under the direct control of Government, some conflict between authorised and unauthorised opinion must occur, at least in seasons of acute controversy on fundamental problems. The stenographic report of the debate in the Lower House of the Prussian Landtag on February 7th, 1898, relating to a draft decree for the disciplinary control of Privat-dozenten in the Universities, contains a number of interesting references to certain aspects of this question. Cp. especially the speeches of Dr. Virchow, Herr Munckel, and Herr Rickert.

of higher education, or the remodelling of an older one. What men strongly believe, they usually desire to teach. They become dissatisfied with schools which are not at unity with their own fundamental principles of belief. But it cannot be said that the great moral and intellectual upheaval, which is now taking place in the world of thought, has yet resulted in any new code of ethics, sufficiently formulated at any rate to be used as the unifying purpose of a system of higher schools.

This aspect of the question is forcibly discussed by Professor Paulsen. (Geschichte des gelehrten Unterrichts auf den deutschen Schulen und Universitäten, ii. 672.) He has been discussing the details of the curriculum of the higher secondary school of the future. He has laid stress on the place which instruction in the elements of philosophy will resume in its plan of studies; on the formative influences of modern literatures; on the educational virtue of the mother tongue. He then states the difficulty which really underlies all this possible change. Will not, he asks, the result be that the school will be thrust into all the intellectual struggles which agitate the world outside? "Will not political and ecclesiastical movements find much easier entrance into the higher secondary schools than they do to-day? . . . Hitherto the Gymnasium has enjoyed in the ancient classics a lasting possession lying beyond all party quarrels. . . . Plato and Thucydides, Cicero and Tacitus are common ground for all nations, all sects, all parties. Classical antiquity, far removed from all disputes, provides for teachers and pupils a peaceful place for calm and dispassionate reflexion on what is eternal and common to all humanity alike: a neutral ground in the midst of pelting strife. What can be better, or more wholesome, for the school? . . . If we were to replace the classics by modern authors, a struggle for the schools would blaze out; each party would do its utmost to get into the curriculum the books and the point of view which it approved, with the intention of capturing the sympathies of the rising generation. . . . Each party has its index of forbidden and canonical writers. It would be the same with philosophy. Ought Kant and Herbart, Leibnitz or Schopenhauer, or perhaps St. Thomas Aquinas, to be dominant in the school? Ought we to teach orthodox or sceptical philosophy? In Formal Logic one could shirk these dilemmas, but not in Ethics and Psychology. And thus here too we should have war in the school. Yes, it is true. And this it is which, if anything could do so, would make me dubious of the future of our secondary schools. Indeed, if the ousting of the classical languages meant that the door would be more widely opened for political party struggles to enter into the school, and that with each shifting of the wind in the upper regions there would be a change in the authors read in the classes, it would assuredly be better for the Gymnasium to go on teaching Greek and Latin to the end of time, or even to teach the language of China and Babylon. Nevertheless the good sense which is immanent in the structure of things, and the healthy nature of the German people forbid us to think that matters would come to

such a pass. Possibly not without a struggle, but gradually for all that, there would be diffused a sort of general conviction that the school ought not to be made the exercise ground of parties; and experience would gradually force people to see that we do not actually succeed in capturing souls by such clumsy weapons as tests for teachers and compulsory attendance at particular schools . . . that, on the contrary, every effort of this kind tends at last to produce the reverse effect; and that violent and one-sided pressure on mind and conscience tends to bring on a reaction."

In so far, however, as this danger exists, it might be some relief if instruction in classical history and literature were to become part of the curriculum of the highest classes of the Oberrealschulen. Just as the classical school has been compelled to admit into its curriculum a certain admixture of modern studies in order that its pupils may not be wholly cut off from the perhaps disturbing influence of modern ideas, so it is possible that the non-classical school may be driven to infuse into its plan of work an element of classical culture in order that its pupils may be given direct access to literatures and philosophies, which are still educationally significant, though in point of date remote. At first sight, it might appear that the reciprocal movement would at once lead to the blending of the curricula of these two types of school into a single whole. Such an outcome, however, cannot be looked for within any measurable distance; first, because there is not yet sufficient experience to prove that modern languages can be made to furnish for the training of the logical powers a discipline equal to that afforded by Latin; and second, because no one school-curriculum can at present suffice to contain all the essential elements of classical and modern culture. The two opposite types of curricula may approximate to one another, but they are unlikely, for many years to come at all events, to coincide. The one will draw its chief mass of material from the classics, the other from modern languages and literature.

If, however, approximation takes place (and there are many signs that this is probable), the form in which classical studies shall be introduced into the highest classes of the Oberrealschulen becomes a matter of importance. There are two different views as to the method to be preferred. Some maintain that an insight into the meaning and value of classical antiquity should be given by the use of modern translations of the chief classical masterpieces. Others, holding that it is impossible to get at the heart of any foreign civilisation except by the study of its literature in the original language, favour attempts to provide optional instruction in Latin to the boys in the three highest (year's) classes of the non-classical schools.* Of course, the second plan is compatible with the first, but some maintain that the first would be sufficient without the second.

* Cp. for (1) Paulsen. *Geschichte des gelehrten Unterrichts*, vol. ii., pp. 658, *seq.* And for (2) Wernicke: *Zum Kieler Gutachten über die Oberrealschulfrage* in the *Zeitschrift für lateinlose höhere Schulen* (February, 1897.)

It is certain that, by means of good translations a great deal can be done to stimulate interest and pleasure in classical history and literature. Some translations are themselves classical. It has often been remarked in this connection that our English Bible itself is a proof, if one were needed, that a translation may have an immense influence on the style and habit of thought of a nation—to speak only, of course, of the literary aspect of that influence. The same is true of Luther's translation of the Scriptures in its effect on Germany. Shakespeare, who had "small Latin and less Greek," found in Sir Thomas North's translation of Plutarch's Lives the suggestive force which came to Keats, who knew no Greek, through Chapman's translation of Homer. It may be replied that these were men of genius, and able, therefore, to go straight to the central point of things to which all studies converge. But what was true of them may in less measure be true of ordinary men also. It would seem likely, however, that he only can interpret classical life and literature so as to make them living things for those who are ignorant of the originals, who is himself an eager student of the classical texts. It is doubtful whether one who is himself ignorant of Latin and Greek can communicate any real idea of Greek and Latin literature to pupils also ignorant. There is nevertheless a growing inclination to use excellent translations of the classics as an instrument in general education. There can be no doubt that Mr. Jowett's translation of Plato and Messrs. Butcher and Lang's translation of the Odyssey have done much in this generation to diffuse a true interest in Greek letters, as have also the writings and lectures of Professor Lewis Campbell, Professor Jebb, Mr. Arthur Sidgwick, Mr. Morshead and many others. It is interesting to note that in the Prussian Curricula for Secondary Schools (1891) the teachers in Gymnasien are advised to use with their pupils good translations of the Iliad and Odyssey in so far as it proves impossible to read the whole of those poems in the original Greek.*

The further, or alternative, proposal that boys in the three highest classes of Oberrealschulen should be given an opportunity of learning Latin if they like, presents no real difficulty. The object of their doing so would be two-fold: First, the very practical one of being able to pass certain examinations in which Latin is obligatory; but, second, the more truly educational reason of gaining the power to read the Latin classics in the original. For the latter purpose, it is clear that the language would be attacked in a manner quite different from that appropriate to the "mental gymnastic" of early schooldays. The aim would be quickly to reach the point of being able to read Virgil or Horace with pleasure and appreciation of the contents and style. Clever boys, well-trained previously in one or two foreign languages, and interested in the subject matter of the books, would with surprising quickness gain sufficient mastery over the language to be able to read the Æneid and the Odes with profit and pleasure.

* Cp. Mr. D'Arcy Thompson's *Day Dreams of a Schoolmaster* (Edinburgh, 1864), pp. 91-2.

They would not be kept at mere grammatical drill a day longer than was necessary to enable them to make their way through a sentence by distinguishing subject from object, and verb from noun. As soon as they could use the dictionary, they would be put to some easy author, and made to increase their vocabulary by wide reading. Exactly the same might be done with Greek.* Professor Paulsen tells us how he himself began Latin at 15¼ and Greek half a year later. It is well known that many men, who have done no Greek at school, have very quickly acquired a knowledge of the language sufficient for the purposes of Responsions at Oxford. Some women students, educated in schools where Greek is only a subsidiary part of the curriculum, have applied themselves to that language at an age when their brothers were already high up in the sixth form at their public school, and nevertheless have acquitted themselves with the greatest credit, in Honour Classical Examinations at the Universities. It may be true that, as a general rule, the classical knowledge of such "late learners" may not be as exact as would have been the case had they begun Latin at nine, and Greek at eleven or twelve. But it may nevertheless be not merely sufficient for their purpose but adequate to the intelligent and fruitful study of classical antiquity. Dr. Rümelin reminds us that Goethe and Schiller were "weak in Greek," and that Lessing, Wieland, and Herder would have been "ploughed in Greek prose," according to the standard of the leaving examination at Württemberg of 1881.†

Note.—The following passage occurs in a recently published French vindication of classical studies in the higher Secondary Education :—

"Quelle est la nature et le but de cet enseignement secondaire donné dans les collèges aux jeunes gens qui constitueront un jour ce qu'on appelle les classes dirigeantes ?

"C'est une discipline intellectuelle qui, par un exercice universel et harmonieux des facultés de l'esprit, doit les développer toutes, les affiner, les assouplir. Il ne vise donc point précisément à enrichir, ou, comme on dit, à meubler l'esprit de l'adolescent d'une quantité plus ou moins considérable de connaissances positives, mais bien plutôt à le mettre en état de les acquérir, le moment venu, avec facilité, et d'y entrer plus avant. L'enseignement du collège ne doit pas plus faire des savants que des commerçants ou des industriels : il doit faire des esprits cultivés. Son caractère distinctif, c'est précisément d'être désintéressé,

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* It is sometimes urged that the fact of so much scientific terminology being taken from the Greek makes a knowledge of the Greek language desirable for men of science. There may be some force in this argument; but it must not be pressed too far. A knowledge of Greek might possibly (though improbably) enable a student of chemistry to divine from the term "oxygen" Lavoisier's theory than oxygen was a necessary constituent of every acid. But, all the same, the student would have to learn further that Lavoisier was wrong. Such a term as "oxygen" has, in fact, become a counter in language, and the etymology, though historically interesting, is scientifically misleading. If it is contended that a scientific man may need Greek in order to invent nomenclature, it may be replied that it is open to him to consult a Greek scholar on the subject, just as Faraday himself "referred again and again to Whewell and his Greek" for the names he had to use in his papers.

† Rümelin. *Reden und Aufsätze* (Neue Folge), p. 549.

Cp. Lewes. *The Story of Goethe's Life*, p. 299. "Schiller read the Greek tragedians in wretched French translations, and with such aid translated the *Iphigenia* of Euripides. Homer, in Voss's faithful version, became to him what Homer long was to Goethe."

c'est à dire de n'avoir pas d'application immédiate dans la pratique de la vie; comme le propre de l'enseignement spécial c'est, au contraire, d'être *utilitaire*. C'est ce qui vaut aux humanités classiques le dédain des gens à courte vue pour qui la valeur des connaissances se mesure exactement à l'emploi qu'on en peut faire. A ce compte, l'école devient le noviciat du magasin ou de l'usine, et il n'y a guère plus de différence entre l'éducation supérieure et l'apprentissage qu'entre la profession et le métier.

"Il est parfaitement vrai que les humanités classiques ne sont pas utiles de cette façon-là. Si l'on vous pose la question saugrenue: 'A quoi sert le grec et à quoi le latin?' il faut répondre résolument: 'A rien.' Cela n'apprend en effet ni à tenir les livres de compte ni à construire une machine, ni à faire aller un commerce. C'est pourquoi les humanités sont la base d'une éducation *libérale*.

"Mais elles ne sont pas pour cela une gymnastique stérile. En aiguisant l'esprit, en lui ouvrant des horizons plus larges, en sollicitant la curiosité intellectuelle, en formant le goût, elles font mieux qu'instruire, elles *élèvent*, au sens le plus juste et le plus vif du mot; elles préparent des hommes capables d'habiter les hautes sphères de l'intelligence, de comprendre et d'aimer le beau, l'idéal, et même de cultiver plus fructueusement que d'autres les branches du savoir qu'ils ont paru négliger d'abord. Partant, elles font quelque chose de meilleur, de plus fécond et finalement de plus utile que l'instruction qui s'enferme dans le cercle des connaissances utiles..... L'étude des langues classiques demande un travail plus long, plus intense et, disons-le hardiment, plus intellectuel partant plus fructueux, qu'aucune des langues vivantes qu'on leur substitue dans les humanités modernes."

From "L'État et ses rivaux dans l'enseignement secondaire," par Le P. Joseph Burnichon, S.J. (Paris. Librairie Ch. Poussielque, rue Cassette 15. 1898). pp. 252, 269.

XVII.—The Passage of Boys from Elementary to Secondary Schools.

The plans described in the foregoing section have a close bearing on the hopes which many people cherish for an easier passage (without detriment to educational excellence) from the elementary to the higher schools. At present, the use of Latin as the dominant discipline in secondary education tends to differentiate the studies of pupils in primary and secondary schools from a very early age. In England and in Germany, a boy who is going on to one of the great classical schools is generally put to his Latin at nine or ten. In one of our most famous and successful preparatory schools, boys of nine do twelve hours a week of Latin, and four hours a week of French. When they reach the age of eleven or thereabouts, they add to this eight hours a week of Greek. Besides this, they are giving six hours a week to mathematics (arithmetic and Euclid), and eight hours a week to English subjects (including scripture, history, and geography). This means that, roughly speaking, the boys under 11 work thirty hours a week, and those over 11 about thirty-seven. Classical teaching forms more than a third of the smaller of these totals, and more than a half of the larger one. When, therefore, at the age of 13 or 14 they enter for the scholarship or entrance examinations at one of the great public schools, their standard of classical knowledge is something quite beyond the reach of a boy trained in the normal curriculum of an elementary school. Thus we have, for different classes of boys, two entirely different courses of early education. The secondary school, as a rule, expects and gets a kind of knowledge which requires a very careful and searching course of preparatory education. Thus

the first grade secondary school does not, as a matter of fact in England, stand "end-on" to the public elementary school. It has its own special channels of supply, and its preparatory discipline is quite other in point of subjects and methods from that given in the schools under the Elementary Education Acts. There are, of course, other considerations to be taken into account (the influence of the home, for example, and so forth), but this fundamental difference in the subject matter of instruction is in itself an obstacle to many schemes of "grading" which appear simple at first sight. Nor can it be fairly said that the difference in curriculum is maintained for social reasons or for motives of privilege. It is partly traditional, partly the natural outcome of circumstances, partly the result of the previous education of the teachers, but largely due to a belief among secondary school authorities that Latin, with Greek at a somewhat later stage, is an unrivalled instrument in intellectual discipline. Many eminent scholars have held that it is a mistake to begin Latin before, say, the age of 12; but the English practice is to begin early, and there is evidently much to be said, from experience, in favour of so doing.*

It is much to be desired that the passage of pupils of real ability from the public elementary to the secondary schools should be made as simple and as natural as considerations of high educational efficiency permit. There are few things more important in the national interest than to secure for children of real talent, in whatever rank of life they may be born, the education most appropriate to the full development of their powers, and most favourable to their later exercise. As has recently been said: "It is not given to every citizen to be both philosopher and king, but our king-philosophers must be drawn from as wide a field as possible." In Mr. Ruskin's words, "We must leave no Giotto by the sheepfolds."

It is clear from the history of education that, at least during the last two centuries and a half, there has been a steady growth of the desire so to knit the different grades of schools together

* Latin was begun by Goethe in his sixth, and by John Stuart Mill in his eighth, year. But the view that Latin is better begun about 12 is held by Dr. Reinhardt and other eminent classical scholars in Germany. Prof. Wilkins, of Owens' College, Manchester, has also drawn my attention to the following passage in the Translator's Preface to Madvig's *Latin Grammar for Schools* (Oxford, Parker, 1349). "Professor Madvig considers, and it is the opinion of one who, be it remembered, is at once an able scholar and himself practically acquainted with education, that the study of Latin is commonly commenced too early. 'The object,' he remarks, 'is a remote and difficult one, for which the learner is not yet prepared by those which are nearer and easier of accomplishment. It is, therefore, acquired but slowly, and for a long time with a certain indistinctness and confusion, which are removed with difficulty at a later period. The student has to go through the hands of many instructors and becomes wearied of the task without having acquired any clear and definite views. *Begin teaching Latin* a few years later (say, at the age of twelve), but then with concentrated energy and with habits of learning and application already formed, and as favourable a result would be obtained with less irksomeness to the pupil.'" It may perhaps be replied, and with some truth, that the conditions of the examinations for entrance scholarships at the English Public Schools make Madvig's scheme a "counsel of perfection." Similar competitive tests for little boys do not, however, exist in Germany or Denmark.

that the accident of birth may not in itself debar a clever child from obtaining the kind of schooling which its powers deserve. As long ago as 1632 John Amos Comenius argued against two contemporary writers, who, as he said, "would persuade us that only those boys and girls who are destined for manual labour should be sent to the Vernacular School (*i.e.*, the public elementary school), while boys whose parents wish them to receive a higher education should be sent straight to the Latin school (*i.e.*, to the secondary school). From this view," wrote Comenius, "my whole didactic system forces me to dissent.

"(i) The education that I propose includes all that is proper for a man, and is one in which all men who are born into this world should share. All, therefore, as far as possible, should be educated together that they may stimulate and urge on one another.

"(ii) We wish all men to be trained in all the virtues, especially in modesty, sociability, and politeness, and it is therefore undesirable to create class distinctions at such an early age, or to give some children the opportunity of considering their own lot with satisfaction and that of others with scorn."*

The noble aspirations conveyed in these words have never lost their force. And at the present time in Germany and in other countries there are many who are labouring to realise the aim of a unified course of education, developing stage from stage, but common to all classes of children in the State. In Germany, this form of educational organisation is often advocated under the name of the Einheits-Schule.† Sometimes this advocacy takes the form of rather heated diatribes against the alleged injustice of existing systems. A more weighty kind of argument, however, is that embodied in an often-quoted aphorism of Dr. Schmoller, Rector of the University of Berlin, that "the ultimate cause of all social peril lies not in differences of material wealth, but in violent contrasts in educational opportunity." Der letzte Grund aller socialen Gefahr liegt nicht in der Dissonanz der Besitze, sondern der Bildungsgegensätze. In other words, the true unifying of the nation must be sought through the schools.

Now it is clear that this means a great deal more than might appear at first sight. The large majority of children in a country, under present conditions, receive only the elementary stages of education. In Germany and many other countries they are obliged to stay at the elementary school till they are fourteen. In England, most of them leave at eleven, or a little later. Again, in each of the States of the German Empire, and in all other countries where the system of public education is arranged on the German model, the State lays down a very carefully prepared course of instruction, embracing what it considers to be the

* Comenius. *The Great Didactic*, translated by M. W. Keatinge. (London, Black, 1896), p. 418.

† This term is used, however, in two distinct technical senses. One as explained in the text above; the other as signifying a common nomenclature and structure for all secondary schools throughout the different States of the German Empire.

necessary ingredients of primary education, and extending over the whole period of primary school life—viz., from 6 to 14. Through this course of instruction all the children in all the schools must pass. In England, the curriculum in the elementary schools varies in different towns, and even in different schools in the same town. Moreover, as English children are free to leave school at very different ages, and few remain till they are fourteen, the actual course of instruction is not so planned as to extend over a definite period, and as a general rule neither contains as many branches of teaching as the German curriculum, nor brings what subjects are taught into as close a connection with each other in the mind of the child itself. It is evident, therefore, that the chances of so organising primary and secondary education as to afford every facility to capable children for continuing their education are more favourable in Germany than is the case at present in England. When all the children in the elementary schools can be brought up into line, so to speak, at the end of their fourteenth year, their attainments will naturally reach a normal standard to which it is easier to adjust the curriculum and requirements of the class in the secondary school reached by children of the corresponding age. And again, the practically uniform *organisation* of the secondary schools, whatever the type of their *curriculum*, offers a further opportunity for such adjustment. Each secondary school is divided into classes, assigned to each year of school life, and it is known by carefully recorded observation what are the normal attainments of a boy in each year in his secondary school course. Thus the two surfaces, upper and lower, which it is desired to bring into contact, are, so to say, planed smooth, and are neither of them irregular and uneven. Moreover, the two grades of school both stand in a relation, though by no means in the same relation, to the same local municipal authority. And both grades of school are under the supervision, though by no means under the same kind of supervision, of one Education Department, divided indeed for natural convenience of its work into two sections, but so closely united that many of its officers serve as counsellors to both sections alike.

The result of all this is that a large number of German children (possibly, if there were statistics to be compared, a larger proportion of children than in England) do actually receive their early education, or a part of it, in the public elementary schools, and then proceed to the secondary. But the Governments in the different States of Germany have, for the advantage of the children and to the great benefit of the intellectual and commercial interests of the community, made it an essential principle of their work to keep the standard of the secondary schools at the highest possible level. They have regarded it as their duty to raise the intellectual standard of the elementary schools, in order to enable primary scholars to get there the necessary preparation for the secondary schools, believing it to be dangerous to adopt what would be the converse method of relaxing the conditions of entrance to, and of work in, the

secondary schools in order to facilitate the admission of primary scholars whose preparation might have been defective and incomplete.

It will thus be seen that the most powerful factor in bringing about such adjustment as exists between the systems of primary and secondary education has been the insistence by the German Governments on a very careful planning of school curricula. The top limit of the primary schools has a straight selvage of its own. The correspondent place in the secondary schools has an equally definite line of normal attainment. Now this is a great advantage to families of small means. In Germany, as in England, many of the most eminent men have been born in the humbler middle class.* Brought up in self-denying and comparatively cultivated homes, these men have derived strength of character and habits of intellectual industry from spare living and from the knowledge that they must rely upon their own efforts for success. These are the men, and those like them but born in perhaps needier circumstances, whom the State believes it to be both its interest and its duty to help forward to the best education which can be found for them. And the whole system of German education gives, in a degree hardly realised in England, intellectual opportunity to boys of this kind. It is not too much to say that in England the sons of teachers, of clerks in the Civil Service, of smaller tradesmen, and of the poorer professional men have a very much worse chance of getting at a moderate price a secondary education of high quality and publicly attested merit than have the corresponding classes in Germany. And this is a matter of grave moment alike to the intellectual and the commercial interests of this country.

But it will be seen from this that everything turns on the *quality* of the education given. Those who know what a good education is, and can pay for it, will, as a rule, make any economy rather than deprive their children of the advantages which it confers. But a great many people are naturally not in a position to know a good school from a bad one. They may have never themselves enjoyed the good schooling which they desire for their children. Their friends may not be competent to advise them. There may be no general knowledge in their neighbourhood as to the real quality of the different schools inviting local support. Thus it often happens in England that a parent has no standard in his mind by which safely to test the education offered. He wants to buy something, the quality of which is of great importance to himself and of vital importance to his son, but he may have to buy it in a poke. He may even be so ignorant of

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* Paulsen (*Geschichte des gelehrten Unterrichts*, vol. ii., 683) mentions, in illustration of this fact, the names of Melancthon, Wolf, Kant, Fichte; Winckelmann, Heyne, Voss, Herder; and in the *Report and Evidence upon the Recommendations of H.M.'s Commissioners for inquiring into the state of the University of Oxford* (Oxford, 1854), Dr. Pusey states that he "was much struck, many years ago, in looking over the *Biographia Britannica* for the history of our Divines, to observe how many of them were sons of tradesmen."

the matter as not to know how ignorant he is. In Germany, however, things are very different. Good education has been general for many generations. A great deal more is known by ordinary people about the different grades and types of schools than here. Anyone, for a few pence, can get an admirable and clear account of the curriculum and course of study of any secondary school he may name. Any bookseller will get him the Government rules which determine the standard and range of the work done in each type of school. His friends and relations are familiar with the educational opportunities of the place. The schools are much more of public institutions than they are in England. And every school of every grade is carefully and searchingly inspected by Government inspectors, all of whom have at one time been at the University and have themselves taught in schools. The actual attainments of the individual scholars are tested year by year by a joint examining commission, consisting partly of the board of Government inspectors and partly of the teachers in the school itself. There are no competitive examinations for scholarships or prizes. There is no cramming up first for one, and then for another, external test. All is done steadily and regularly with the precision of a great machine, with the efficiency of a well-organised army. But the work is very hard, unceasingly exacting on boys and teachers alike, and nothing is allowed to stand in the way of a high standard throughout the school. The backward boy is as much considered as the forward. And, for the winning of any certificate, the boy's work in class during the school year is as carefully recorded and taken into account as the answers he writes or gives in the actual examination itself.

Thus, the conditions are favourable for a close connection between primary and secondary education. But, when the nature of education is taken into account, and it is realised that a boy's knowledge and character at fourteen, or at any other age which may be taken, are the resultant of all that he has learnt and heard and been during the whole of the preceding years, and not only of what he has learnt, heard or been during the comparatively small part of his waking life actually spent within the school walls, it becomes evident that even less depends upon the school than upon the home. It is his parentage and the stock from which he comes, his mother's care and influence and example, the ambitions, the conversation, and the interests of his home life, his intercourse with his friends, and the standard of public opinion in the circle in which he lives, that will have done most to form the lad's habits of mind and body, to determine his intellectual outlook, and to give him quickness of perception and sturdiness of character. The school counts for a great deal, but for little in comparison with these. And when, therefore, a boy comes to the age at which his parents may think of sending him to a secondary school, and his powers and attainments come to be measured against those of his contemporaries, there are two factors which will have gone towards making him what he is —school and home. It is possible, though difficult, to equalise

the opportunities provided by the first. But no power on earth can equalise the opportunities provided by the second, not even the arrangements proposed by Plato for his Republic, although they were to go so far as to destroy family life itself.

Thus the development of the Einheits Schule or 'common school' in any real sense of the word, is far from being anything so simple as a matter of mere educational organisation. It is the social question in its most difficult form, and, moreover, the one branch of the social question which the powers of Government and Society, even if stretched to their uttermost, could do little to solve. Among the causes which must co-operate in producing the desired character, aptitudes and knowledge in the child, the school (and especially the day school) does not occupy the determinative place. A much more powerful factor, where its force is unabated, is the moral tradition of the home and neighbourhood and nation. There is reason to think that the immense development of public elementary education, which has taken place in so many countries within the present century, has not always been an actual *addition* to the stock of really educative influences previously enjoyed. In some cases it has rather been an instinctive effort to fill a vacuum, caused, or threatened to be caused, by the disturbance or evaporation of earlier restraints.

The strongest motive which has always induced educational reformers, like Comenius, to advocate a common course of education in the same schools for all children in the State, has been an intense desire to obliterate false distinctions and needless estrangements between class and class. They have taken it for granted that co-instruction in the same classes and in the same buildings would help to secure social equality by diffusing among rich and poor alike the happy associations of common school-days. It is evident that ignorance of each other's point of view and mistaken ideas of each other's way of life have been fruitful causes of misunderstanding and of distrust between different classes in society. Whatever removes this kind of misconception is a public gain. But it is far from being proved that going to the same day-school is sufficient to pull up the deeper roots of social prejudice, any more than worshipping in the same church or travelling by the same means of public conveyance has been found sufficient to obliterate these distinctions. The changed conditions of modern life—our crowding into vast cities, the more rapid movements of population, our frequent changes of residence, the disturbance of the old unwritten social order—have all affected the problem even within the memory of living men in many parts of the Old World and of the New. The first and second books of the *Prelude*, in which Wordsworth describes his own childhood and school-time at Hawkshead, in the English lakes, reflect a happy form of social unity among the scholars in the little secondary school. Similar cases may even still be found, but they appear to exist rather as survivals of an old order than as harbingers of a new one. In his work on France, Mr. Bodley, while speaking in high terms of the intellectual standard of French secondary schools, states that their influence in producing social equality among

the pupils drawn from different classes is practically nil.* And in Germany, with its unrivalled provision of cheap and excellent secondary day-schools and its high tradition of respect for educational opportunities, the development of secondary schools of all kinds, and specially of that kind which is attractive and useful to the lower middle classes, has by no means been accompanied by an obliteration of class feeling. The following passage in the opening address of Dr. Schmoller, Rector of the University of Berlin, at the meeting of the "Verein für Sozialpolitik," held at Köln, in September, 1897, bears on this point:—

"We in Germany," he is reported to have said, "have a stronger monarchical power than exists in any other country; we have a homogeneous Civil Service, of which no other State can boast the like; we have a stronger and better educated middle class than any other nation; we are the people with the best elementary schools; we are a nation of earnest thought and of strong religious feeling, and, therefore, a nation in which social reform gradually develops itself. But the further obligation is thereby laid on us that we do not suffer one-sided class interest to seize the leadership in affairs. We must secure a just and equitable balance of all interests. *Tout comprendre c'est tout pardonner.* The conflict of interests has indisputably become fiercer, more vivid (realistischer), one may say, more brutal, during the last 20 years. . . . The task that lies before us is the maintenance of our great national institutions and of the sense of duty, of the obligations of the upper classes towards those who are less favourably placed. This sense of duty, this sense of obligation, seems to be the great duty of our country." †

Notice should also be taken of a remarkable passage in the concluding chapter of the new edition of Professor Paulsen's *History of Higher Education in the German Schools and Universities.*‡ "At this point, indeed, we stumble up against the strong resistance which for some time has everywhere opposed itself to a wholesome development of our educational system. I mean the tendency towards social exclusiveness (der sozialaristokratische Zug) which has become so remarkable a feature in our national life during the last generation or thereabouts."

It is not improbably the case that social equality among the scholars in a secondary day-school is, when it exists, rather itself the effect of other social conditions than that the fact of attending the same day-school lays the foundation of a permanent feeling of social unity under those circumstances of national or urban life which are unfavourable to such unity. In a small town or village, where the position and character of the different families is fairly well known, where there happens to be general good feeling, and where, in a pleasant sense, there is a more or less recognised hierarchy of social service, the boys of different families may well meet at school under conditions permitting and encouraging friendly and intimate relations between those who would even otherwise have hardly been complete strangers to one another. But in a vast city, among a shifting population, among units casually thrown

* Bodley's *France* (Macmillan, 1898), vol. i., pp. 190 and 125.
† *Kölnische Zeitung* (Abend-Ausgabe), September 23, 1897.
‡ Vol. ii., pp. 680 *seq.*

together and connected by little else than the perhaps temporary circumstance of neighbourhood, things are necessarily different. Parents, conscious of their ignorance of the upbringing of their son's fellow-scholars, are on their guard, and may even discourage the out-of-school intimacies among playmates which are the real basis of lasting friendship. Mere juxtaposition in a classroom may co-exist with a virtual estrangement, all the more definite because it has persisted through frequent opportunities for closer acquaintance. The present writer would venture to question the aphorism of Dr. Schmoller, quoted above, that the ultimate cause of these social difficulties is to be found in inequalities of educational opportunity. Those inequalities are indeed deplorable, and no efforts should be spared to correct and remove them. But he is inclined to believe that the real root of the trouble lies deeper still. So far as it is possible to find out the real conditions of secondary school-life in a past generation, the evidence seems to point to the presence of another factor more powerful than any other in producing a feeling of solidarity among groups of people drawn from different ranks of society; that is, the existence of strong agreement on principles affecting conduct and the spiritual life. Men have, it is true, been always divided from one another on these subjects, and in England hardly less so than in other countries. But, nevertheless, large and coherent groups of them have been dominated by the influence of one or other strong tradition, an influence which has profoundly, though often unconsciously, affected the moral climate and the teaching in the schools. It may, perhaps, be truly said that the ultimate cause of social danger is not so much inequality in opportunities of instruction as instinctively felt divergence as to the underlying sanctions of conduct.*

In so far as these considerations are felt by the reader to have any weight, it will be agreed that the noble aims of the advocates of the Einheits Schule or 'common school' will mainly depend for their realisation on spiritual changes rather than on mechanical readjustments of educational supply. But, however

* There are some observers who believe that a change has come over the tone of some of our great secondary schools. Thus, Dr. Percival, formerly headmaster of Clifton and Rugby, and now Bishop of Hereford, writes in his introduction to Dr. Findlay's *Arnold of Rugby* (Cambridge University Press, 1897, p. xxiii.). "School life, amidst present tendencies, greatly needs the influence of Arnold's Christian idealism. The growth of wealth and luxury, to say nothing of other causes, has infected schools, as it has infected society at large, with a sort of epicurean materialism. Moreover the extreme publicity of modern life produces, especially in the young, a kind of sensationalism which is by no means favourable to the higher moral and spiritual life. These decadent tendencies may be illustrated by the absorbing influence of the athletic spirit, which in many quarters is no longer a wholesome recreative influence, but so fills the minds and thoughts of both men and boys, and so affects their tastes, as to overlay and stifle moral enthusiasm and ideal aims and purposes."

Cp. von Massow. *Reform oder Revolution* (Berlin, Liebmann, 1895), p. 244. "Der Materialismus in uns lähmt unsere Kraft." And Paulsen. *Geschichte des gelehrten Unterrichts*, 1897, (vol. ii., 667). "Bei der Masse der Gebildeten tritt übrigens der Mangel an philosophischer Bildung in der vollständigen Unsicherheit in den letzten Dingen überhaupt zu Tage. Und diese subjektive Unsicherheit sucht sich dann wohl hinter einer Art von grundsätzlichem Skeptizismus zu verschleiern."

strongly this may be felt, it is none the less clear that any artificial obstructions to true equality of educational opportunity should be removed, subject to the condition that nothing be done to impair the quality of the education given in any type of school. This condition is indeed imperative. Whatever else may be possible, no remedy can be found in lowering the educational efficiency of the schools. A nation which does that does it at its peril, with the certainty, indeed, of future ruin. For the standard in these things is set, not by each nation for itself, but, in the present conditions of the world, by the nation which is educationally the most advanced, for the rest. The great leaving-examination, which really tests the outcome of the schools, is an international one. It is not more essential to compare navies than to compare the intellectual standard of the secondary schools. And the intellectual standard comprises two elements —knowledge and the power of using knowledge. "Character," said Archbishop Potter, of New York, in a recent address, "is what counts most in the world, and character is needed in civic life."* But character itself may prove perilous obstinacy unless it be informed by knowledge. That is the inevitable result of the immense complexity of modern life.

To give, therefore, the necessary knowledge, the power of using that knowledge and the will to use it right, and to give these benefits in their most appropriate form to all boys competent to receive and use them, in whatever rank they may be born, is the aim of educational organisation in the modern state. But the real difficulties of the problem turn upon the details. "Secondary education" means, in point of fact, a number of different things. It is itself divided into many types and, according to the number of years to be devoted to it, into several grades of excellence; and a boy's fitness for the one type or the other depends on his aptitude, on his previous training, and on what he is going to be. On this point, Mr. Addiscott, the President of the National Union of Teachers for 1897-8, made some striking observations in an address to the Conference of Science and Art Teachers held at the Society of Arts on January 14th, 1898.

"I cannot but think," he said,† "that much of the nonsense one hears on the subject of secondary education would cease if we possessed a fairly accurate definition of what is meant by it. It is presumed that our primary system should be so moulded that it should lead naturally to a secondary system and thence to University teaching. I have no hesitation in saying that not for one per cent. of the five and a-half millions of children in our primary schools is such a scheme necessary or desirable. We have to deal with large masses of the working population, we have to deal in our great centres of industry with those who will become artisans and foremen and leaders of labour. The needs of this class are outside what I conceive to be secondary education. The satisfaction of these needs will be found in the development of the primary system, through the Higher Grade Board School or organised science school, on to the technical institute." ‡

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* *Times* report, January 13, 1898.

† *Schoolmaster*, January 15, 1898.

‡ There are at times signs of some misunderstanding as to the variety of grades and types of secondary education which exist in fact and in the nature of things both in this and other countries. The *School Board Chronicle* for February 9,

At the School Board Clerk's Conference of 1898, Mr. J. Abel, Clerk of the Nottingham School Board, in the course of a paper on "Secondary Education in English Board Schools" remarked as follows:—

"I would like to repeat the cautionary statement contained in the report of the Secondary Education Commission (Vol. 1, p. 218): 'It is cruelty to attempt to induce poor men, without ability, without connections, and without personal recommendations, to spend three or four years at a University. The usual result is bitter disappointment, and often blasted life.' I heartily agree with the statement that it is not wise to encourage elementary school scholars to proceed to grammar schools by scholarships, or our higher grade school pupils to compete for University bursaries unless there appears to be good prospect of their subsequently doing well in a professional career. As a rule, promising elementary school students would be much better advised to pass through our higher grade schools to the special technical and trade schools, whence the most skilful would be prepared to go out as pioneers and captains of industry, whilst all would be provided with the means of benefiting both themselves and their fellows, in some or other branch of industry."*

Differences of curriculum are among the chief obstacles to easy passage of scholars from the elementary to the secondary schools. But these differences are not due to caprice, still less to the spirit of exclusiveness. They are the natural outcome of tested forms of intellectual discipline. The traditional training which is the basis of the greater part of English secondary education is Latin, and we have seen that Latin is very far from being a lost cause in the best secondary schools of Central Europe. Many schoolmasters, who have had long experience of secondary schools, believe that a boy ought to begin the serious study of the Latin language when he is ten years of age, or even earlier. There is a great deal of strong evidence in support of this view. It is not unchallenged, but it may be said still to hold the field. Now, of course, a great deal of Latin

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1898, printed some Notes (written by a gentleman who is vice-chairman of a School Board and member of the Technical Instruction Committee of a County Council), from which the following extract is taken:—"I disputed the use of the word 'secondary,' contending that there was only one kind of effective educational training, which was continuous and constructive, developing stage out of stage till the objective point was reached. I contest the word 'secondary public system of education,' because there are efforts now being made to lay down a public system of education on the analogies of the railways—third, second and first class, and because even the Royal Commission agreed to preparatory schools leading to secondary schools for a socially better class of schools." In so far as curriculum is referred to, these remarks seem to rest on a misconception of the facts of the case. They also appear to overlook the necessity of different courses of training for different kinds of calling. The different forms of training are, in fact, necessitated by the division of labour. It is interesting to note that the Boston (U.S.A.) report of 1864, quoted by Mr. (afterwards Bishop) Fraser, in his Report on the Common School System of the United States, defines secondary instruction as "occupying the intermediate place between elementary and superior instruction. . . This department is of two kinds, corresponding with the two divisions of superior education—first, as preparatory to the universities or special schools in which students are educated for the professions usually designated as learned; and, second, preparatory to the polytechnic institutions or special schools in which students are trained for the higher practical occupations which are rising rapidly into, or have taken their place in, the rank of the learned professions." (Mr. Fraser's Report, 1866, p. 131 note.)

* *School Board Chronicle*, June 11, 1898, p. 630.

teaching is unintelligent and mechanical. Everyone admits that. And no one has spoken more harshly of some ways of breaking-in boys to Latin than have schoolmasters themselves. Mr. D'Arcy Thompson, in the *Day Dreams of a Schoolmaster*, has spoken of "the round shot of a Latin grammar" having been tied to boys' legs to prevent their "intellectually straying," and Milton wrote bitterly of the "asinine feast of sow thistles and brambles which is commonly set before our choicest and hopefullest Wits, as all the food and entertainment of their tenderest and most docible age." But the fact that Latin has survived even these stupidities in its application, and is still generally regarded as being, when properly taught, an unsurpassed form of early mental discipline, shows what a great deal there is to be said for its use as the mainstay in secondary schools. In so far, however, as it is in the future held to be necessary to make Latin the dominant feature in the curriculum of those schools from the age of nine or ten onwards, there will always be apt to be either a great leakage of the cleverest boys from the elementary schools at an early stage in their course, or a tendency on the part of parents not to send such boys to the elementary schools at all. For it would not be seriously proposed to teach Latin twelve hours a week to the scholars in elementary schools from the age of nine to eleven and a-half, and then from eleven and a-half to thirteen to super-add eight hours a week of Greek. Such a course would make it impossible to insert in the elementary school curriculum the elements of general instruction which are necessary ingredients in a course to end for most of the scholars, say, at fourteen. It would be to sacrifice the interests of the great mass of the children to the interests of a gifted but very small minority. For it is only possible to spend so much of the early years of school life on the formal discipline of Latin and Greek grammar, when it is understood that the boy's course of education will be so prolonged as to afford opportunity in its later stages at school and university for the acquisition of the more general knowledge, to the getting of which the preliminary drill in Latin and Greek is believed to fit him.

There is a further difficulty still. One of the great services which our public elementary schools have rendered to English education has been the attention they have called to improved methods of teaching little children. The development of the methods of education discovered by Pestalozzi and elaborated by Froebel has, so far as England is concerned, been largely the work of the teachers in the infant departments of our public elementary schools. As school life begins at least three years earlier in England than it does in Germany, as much more has been done here than there to study methods of teaching little children as has been done there than here to think out the curriculum for the elder scholars of from twelve to fourteen years of age in the elementary schools. And, of course, in this matter we have been greatly helped by the experience of America. The fact that our infant schools were protected from the influence of payment by results gave free scope to

valuable experiments and fruitful varieties in teaching. Now a significant result of this has been to convince a great number of parents, who do not send their children to elementary schools, that there is urgent need for reform in the methods of teaching little children at home. During the last few years there has been a silent revolution going on in the nursery lessons of many English homes. We are only just beginning to see the first effects of this widespread interest in the methods of early home education. But there are already traces of its influence on the preparatory branches of our English secondary schools. And, though there is as yet no general agreement as to certain important questions relating to the methods and subject-matter of early training, there has already sprung up a conviction that the early years of education are of supreme moment to the intellectual, as well as to the moral, aptitudes of children.* It is becoming widely realised that individual teaching in early years is especially valuable and indeed necessary, because of the great diversity in the powers and interests of quite little children. This individual teaching, however, can only be given in very small classes. Moreover, it needs highly qualified teachers, possessing not only trained and practised skill but, what is not always so easy to find, clear insight into child-life, natural love for teaching and strong sympathy with children. All this means that the kind of teaching, which many parents now regard it as of essential importance to obtain for their little children, is a somewhat costly thing. Yet, in so far as the instruction is wisely given and so framed as to discipline the mind without over-stimulating it, it is probable that children who have enjoyed its advantages will enter upon their course of secondary education with powers well trained to make rapid progress. As this movement extends, and its influence is already widespread, it will tend to raise the standard of instruction in the lowest classes of the secondary schools, and thus to make it all the more necessary for pupils, passing into those schools from the public elementary, to come well prepared and well equipped.

There is also in Germany a movement which, though by no means analogous to the English movement just described, has some of the same effects. A large number of the secondary schools have formed preparatory departments (Vorschulen), which are entered by boys at six years of age. The instruction in these schools is very much the same in point of subjects as that given in the public elementary schools. Their object is specially to prepare boys for the work of the secondary school proper, which begins when they are nine. The effect is to secure a high standard in the lowest classes of the secondary school and to lessen the number of boys coming ill-prepared from little private schools. The fact is that the roots of secondary educa-

* In this connection, acknowledgment should be made of the work of the Froebel Society, and of the Parents' National Education Union (28, Victoria Street, S.W.). Miss Charlotte Mason, the founder of the P.N.E.U., undertook to prepare a paper for this volume, but has unfortunately been prevented by ill-health from finishing it in time for publication.

tion proper tend to strike down into an earlier stage.* And this tendency, which is a many-sided one, renders the ideal of the Einheits Schule yet more distant than before. There are, indeed, large numbers of German educational authorities who maintain that any systematic effort to translate the theory of the Einheits Schule into administrative practice would result, in the present state of feeling, not in causing the children of all classes to pass through the same line of schools, but in actually intensifying class distinctions by causing the establishment of large numbers of excellent but costly preparatory schools under private management.

It is clear, however, that, be the outcome of these various movements what it may, any change in the curriculum of the lower classes of the secondary schools which assimilates it in point of subject to the curriculum of the public elementary school, will, *pro tanto*, make it easier for well-prepared and clever boys to pass from the one grade of schools to the other. This is one reason why the experiments at Altona, at Frankfurt-am-Main and elsewhere are so important. If it proves possible by beginning Latin at twelve to secure results as good as are at present produced by beginning it at nine, a great step will have been taken towards smoothing the passage from the non-classical elementary schools to the classical secondary schools.† But the matter must be regarded as still awaiting conclusive proof. In any event, however, it is clear that the adoption of the new arrangements would require, as a condition essential to success, modern language teaching (*e.g.*, of French) *of the very highest merit* in the classes attended by boys of nine years old and upwards. A further condition would be classical teaching *of the very highest merit* in all those classes of the secondary schools in which Latin was taught, and especially in those in which it was commenced. Furthermore, if the Frankfort scheme realises the expectations of its able and devoted champions, it may lead to an ultimate fusion of the first three years' work in all three types of secondary school. The system of secondary education might then become, so to speak, semi-palmate, *i.e.*, webbed at the base and then separating into the classical, semi-classical and non-classical divisions. At present, as normally organised in Germany, it is trifoliate, each of the three divisions being separate from the first.

The scheme of Einheits-Schulen is a generous one. It is a protest, and in some respects a just protest, against certain forms of exclusiveness. But, in the opinion of the present writer, the difficulties in the way of its realisation, at least in any thorough-

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* In this connection, it is interesting to note the fact that the able headmasters of some of our Higher Grade (Organised Science) Board Schools insist on getting their pupils as early as the 4th or 5th standards, in order that the children may be, so to speak, acclimatised to the requirements of the school for some time before they enter the "Organised Science" department, which is its crown, and in which its most distinctively advanced work is done.

† Reference should be made in this connection to an interesting essay by Dr. Reinhardt, *Die Schulordnung in Comenius Unterrichtlehre und die Frankfurter Lehrplane*. (Leipzig, R. Voigtländer, 1894.)

going sense, are (so far as this country is concerned) practically insuperable. And these difficulties lie far beyond the reach of merely administrative control. In some countries, for example, in parts of Switzerland and of Scandinavia, the scheme may be actually realised. But there is no sign of any such result in countries with a more elaborate social structure and with Imperial responsibilities. The latter countries will probably always retain two categories of secondary schools, the most characteristic, (but not the only) work of the one category being the production of highly skilled and expert service, and the most characteristic, (but not the only) work of the other, the production of directive masterhood. In each category there will probably be, for many years to come, schools of differing curricula, but the first will in the main incline to "modern" studies, and the second in the main to the classical. The first will probably have a closer connection with the non-classical elementary schools than will the second, which, indeed, will probably continue to have a number of classical elementary schools (if that expression be permitted) preparatory to itself. And it seems likely that, while in this country the first category will be mainly, though not exclusively, day schools, the second will be mainly, though not exclusively, boarding schools.

But though the ideal of the Einheits-Schule may not be realised, much can be done, and should be done, to heal unnecessary divisions between the different categories of our schools. All grades of school, elementary and secondary, are parts of national education: all are members of one body, and the health of each depends in a large measure on the health of the rest. The quickest, perhaps the only, road to true unity in the whole system lies in the friendly intercourse and reciprocal confidence between the different groups of teachers. Such confidence between men of very different experience is most naturally built upon a common feeling of duty. In that, there is "no first or last." But, as an incidental matter which can never affect more than a few, it may be added that, when teachers in the various types of school are able to look back on common associations of academic life, the more easily is opportunity to be found for such friendships to grow. It has hardly been noticed that the remarkable improvement which has taken place in the preparatory secondary schools during the past ten or fifteen years, has been almost wholly due to masters in the great public secondary schools crossing over into what is in fact (in relation to those schools) the elementary grade. There is in consequence a very close fusion of knowledge and interest between the staffs of the great public secondary schools and the staffs of the preparatory schools which feed them. It is hardly doubtful that, by a reciprocal movement, many men will pass from the staffs of the preparatory to those of the great public schools. Similar movements might well take place, and are indeed taking place, as between the non-classical elementary and the non-classical secondary schools, with a corresponding current from the secondary to the elementary. The more that methods, curricula, and aims are discussed among those who have expert know-

ledge of the one or the other type of school, the more certainly will there arise an active school of English thought on the scientific and professional aspects of the art of education. And the development of such a body of doctrine, native to the soil, characteristic of English practice, true to English traditions, based on a study of English character and skilfully adjusted to English needs, would do perhaps more than anything else to secure the unity and to extend the influence of English education.

XVIII.—In Education the Personality of the Teacher more important than anything else.

It remains to be said, however, that the essential thing in all education is the personality of the teacher. Mechanical aids are not in themselves of much avail. Method is indeed necessary; well thought out curricula are an advantage; the testing and comparison of results an indispensable help. But all these things are dead in themselves. The thing that breathes life into them all is the personality of the teacher. In so far as he aims at forming the character of his pupils, the efficacy of his labours chiefly depends upon the clearness of his moral convictions, upon his love for his work, and upon his personal example. On the intellectual side, his influence will largely depend upon his being able to work up afresh in his own mind what he has to teach, and thus to impart to it a new, attractive, and stimulating power. In the words of one of the greatest of English headmasters—"There is a kind of infection in all learning from the teacher to the learner, whereby the learner is induced and drawn to follow the teacher. . . . If you take an inexperienced man and ask him what is the most important thing in the teacher and in the character of his teaching, he will very likely answer fulness and clearness of knowledge; unless the teacher has clear and full knowledge he cannot teach, he will do wrong, he will lead the learners to mistakes; but if he has real accurate knowledge and clearness of knowledge, then he can teach. These are, no doubt, indispensable for really good teaching; *but they are not the most indispensable things;* it is not these which really infect the learner with a desire to learn; it is not fulness, accuracy of knowledge, but freshness of knowledge—that kind of knowledge which comes, as it were, fresh from the teacher's mind—that is in him and living in him." This is the vital force in education, and its influence is felt most strongly when a man would have his pupils' minds "move in charity, rest in Providence, and turn upon the poles of truth."

XIX.—Conclusion and Summary.

The conclusions, to which the preceding pages appear to lead, may be briefly summarised as follows, the remarks applying for the most part to schools for boys only. The German, and specifically the Prussian, system of secondary education excels in the high standard of all-round knowledge with which it equips its pupils. This high standard of general attainment is of great

consequence to the national welfare, alike in commerce and industry, and in the division of intellectual labour. The present results have been obtained by the labour of several generations. Their full significance can only be understood in the light of their history. During the last ninety years, the secondary education of Prussia has been directed by a succession of statesmen of pre-eminent ability, and served by a body of devoted and highly qualified teachers. The efforts of these men, co-ordinated by means of a complex but smoothly working system of central and local administration, have been concentrated on the production of a very high standard of intellectual discipline. In this work they have always given at least equal pains to thinking out beforehand exactly what they wished to do, as to the actual carrying out of the plans so formed. The results have been precision of aim, economy in execution and excellence of quality. The main characteristics of their policy have been the distinct classification of different types of secondary schools, the careful study of the details of local and national educational needs, and the skilful adjustment of curricula to those needs. Each kind of school has been set to do its own work. It has been equipped with the best possible staff, provided with the necessary funds, protected from the conflicting and often ignorant demands of individual parents, assigned its special task, and guided by experienced advice. There has been no payment according to results, or special endowment of one rather than another branch of the curriculum. But the educational outcome of each school has been continuously tested, compared with the outcome of corresponding schools elsewhere and kept up to a high level of all-round efficiency. In recent years, there has arisen a significant tendency to make experiments in the combination of different types of curricula in secondary schools.

On the other hand, the desire to secure a wide range of general information has from time to time produced congestion in the curricula, and has led to complaints of overpressure, which appear to have been generally due rather to the variety of claims made on the boys' attention and mental powers than to any grave excess in the number of compulsory hours of work. There seems to be some reason for thinking that the intellectual strain of the schools has to a certain extent impaired the self-activity of the individual scholars; and that the effect of the system is rather to produce a great deal of well-disciplined and pliant intelligence than any high percentage of independent and original (though, perhaps, somewhat ill-instructed) initiative. The whole system is under very strict control, and consequently somewhat more uniform in tone than are the corresponding schools in this country. Another important point of difference is that the dominant German type is the local day school, while in England one of the principal types is the non-local boarding school. The differences in aim, in the methods of discipline and self-government, in the relative importance assigned to physical and intellectual culture, and in the stress laid respectively on the ethical and mental aspects of school life—differences which

naturally arise from, and are developed by, the day school and the boarding-school respectively—constitute an essential and far-reaching distinction between the German and a principal part of the English system. The German schoolboy, as a rule, works harder at his lessons than his English contemporary. The English schoolboy, as a rule, takes more physical exercise than the German, and is more interested in games. A boy who is near the top of an English secondary boarding-school has generally to bear considerable responsibility, as a prefect, in the internal discipline and organisation of the school. He thus developes the faculty of government and administration. The German boy is much more exclusively occupied with his actual studies.

In Germany the system of Secondary Education is as much a national institution as the Army itself. It is regulated by the State as a necessary line of intellectual, and indirectly of commercial and industrial, defence. It has been moulded with foresight and resolution to many of the new and various needs of modern life. Its methods, experiments and curricula are examined with as much scientific care and interest as is the practice of medicine or of any other branch of professional skill. This is illustrated by the precise and accurate observation now being given to certain permitted deviations from the normal types of school.

The German secondary schools have had a profound influence on the mind and character of the nation. A great part of the intellectual, industrial, and commercial efficiency of Germany can be directly traced to their work. In fact, it may be said that the industrial and commercial effects of the very wide diffusion of a high level of disciplined knowledge are only now beginning to show themselves The conditions of modern industry and commercial enterprise are highly favourable to the effective use of the kind of intelligence and aptitude which is the characteristic product of the German secondary schools. Such a system of schools can, however, only be slowly built up. Time is necessary for the establishment of a high tradition of excellent workmanship, for the perfecting of organisation, and for the selection and training of specially qualified teachers. Germany now possesses the result of the persistent and prudent endeavour of at least three generations. The schools enjoy considerable prestige, are conveniently placed all over the country, and are fully accessible to the whole of the upper and middle class and to clever boys of humbler station. They charge low fees, they bear names which distinctly acquaint the public with the nature of their curriculum, they conform to official regulations in their courses of study, and they all publish for the information and guidance of parents a clear and detailed outline of what they undertake to teach. Prussia secures the efficiency of all its secondary schools, public and private, by rigorous inspection, conducted by a board of Government Inspectors in each Province. These Boards of Inspectors form in effect localised branches of the central authority. The inspectors are all men of high attainment, and have previously had experience as teachers in

secondary schools. They discharge their duties in groups, called "colleges," in order that all the branches of advanced study may be under the supervision of specialists, but that at the same time excessive claims may not be made upon any one department of school work. The leaving and other important examinations are conducted, not by external authorities at a distance, but by joint commissions, composed partly of inspectors and partly of teachers belonging to the school which is being examined. In every subject in all examinations, the work actually done day by day by the boys in class is taken into account, as well as the papers written by them on the examination-day itself. In the course of school work, only those text-books may be used which have received the approval of the Government.

There are comparatively few private secondary schools for boys.* Formerly there were more, but the number has greatly decreased. The present tendencies of collective organisation are unfavourable to them. But private schoolmasters have rendered immense services to German education. Salzmann, Basedow, Froebel, Stoy, were all private schoolmasters. There are some signs of a reaction in German educational thought in favour of private schools. It is felt by many that new ideas in education often make their first appearance in the work of men who do not conform to the regular routine, and on whose proceedings the officials of a State system might not unpardonably look with misgiving or even with dislike. All private schools are under inspection by the State. No one is allowed to teach in a private, any more than in a public, secondary school who has not obtained the academic or other qualifications required by the Government. All teachers in secondary schools are specially trained for their work. The teachers in the public secondary schools of Prussia are ranked as civil servants.

The German system of secondary education is closely bound up with other parts of the national organisation. Boys who successfully complete a six years' course in a recognised secondary school are excused one year's military service, and enjoy a higher *status* while serving. The result is that an increasing number of boys remain at secondary schools for the term of at least six years, and so great is the anxiety to obtain "the certificate for one year's military service as a volunteer" that the teachers are reported to have little or no difficulty in matters of discipline. The possession of this certificate for one year's service marks a man as belonging to the educated classes, a distinction which is somewhat more definite than is the case in our own country. The certificate has also a commercial value, because the best firms require it as an indispensable qualification for their service. Hence the German boy of the middle classes stays at a secondary school longer than his average English contemporary, and (in the absence of any precise comparison of their attainments) it is perhaps not too much to assume that he

* But more than half of the secondary schools for girls are under private management but public inspection. An interesting account of the position of private schools in Germany, by Mr. H. Baumann, will be found in the *Educational Times* for February, 1898.

generally knows more when he leaves. This is an advantage to German culture and to German trade.

The Prussian secondary schools are in two great categories; in the first, the course lasts nine years; in the second, six. In each category there are three types of school, viz., classical (*i.e.*, teaching Greek and Latin), semi-classical (*i.e.*, teaching Latin but not Greek), and non-classical (*i.e.*, teaching no classical tongue). The emphasis in all German secondary schools is laid on linguistic discipline, but every boy is also required to come up to the required standard in religious knowledge, mathematics, history, geography, German literature, and certain branches of natural science. There are no schools exactly corresponding to our secondary "schools of science." Science is taught as an obligatory subject in all secondary schools, but never plays such an important part in the curriculum of those schools as it does in the "Schools of Science" under the Science and Art Department. This difference between English and German schools is partly due to historical reasons, but partly to divergence of educational principle. The Germans have concentrated the intenser forms of scientific study in their Higher Technical Schools, to which the boys may pass if (but only if) they have completed the prescribed course at a secondary school. Educational opinion in Germany prefers to lay stress on a wide general education during the period of secondary school life, and the regulations sternly forbid anything which approaches premature specialisation in any one branch of study. Commercial aptitude is a bye-product in their system of "modern" secondary education. The German secondary schools seem eminently successful in cultivating the powers of apt expression. These powers, it is true, are useful in trade, especially when a young man can use two living languages besides his own. If the arts of making things need brain and practised hand and eye, the craft of selling things needs brain and practised eye and ear and tongue. But that is not the reason why the German schools insist upon the cultivation of linguistic powers. They do so because they regard exact and searching discipline in the use of language to be one of the most beneficial, as it is also one of the cheapest, forms of mental training. The methods of teaching modern languages have received very careful attention in Germany. Remarkable results are being obtained in this branch of school work. Great stress is laid on the pronunciation and conversational use of a modern language, but this is accompanied by very careful teaching of its grammar and idiom.

No German youth may study at a University or enter a profession, unless he has satisfactorily completed the course of secondary education prescribed by the Government as the condition of such a privilege. It is because the Government, and the Government alone, has the power of conferring on any given school the privilege of thus qualifying its pupils for one or other course of higher study or for exemption from one year's military service, that the State is able to compel the schools to conform to its regulations. The "sanctions" of the system lie in the control exercised by the State over the professions, over the Uni-

versities, and over the higher technical schools, and in the conditions of compulsory service in the Army. Thus the structure of the system is entirely different from anything which prevails in this country.

The State exerts influence over secondary education rather by giving or withholding privileges than by direct money grants. These privileges, it will be observed, have indirectly a money value to the parents and scholars concerned. But the State also makes pecuniary grants in aid of secondary education. In Prussia it mostly does so by itself establishing and maintaining so-called "Royal" Secondary Schools, as a supplement to the municipal supply, and often as a reward for municipal activity in educational matters. A Town Council naturally wishes to furnish its citizens with a good and sufficiently varied supply of secondary schools, because it is only by means of such schools that the younger generation can qualify themselves for academic studies or for the various branches of professional life and for the public service. Moreover, the German nation values education for its own sake. When a Town Council wishes to establish a secondary school, it has to induce the Government to recognise it and to attach to it the customary privileges. The Government refuses to do this unless (1) the curriculum conforms to its requirements, (2) the quality of the teaching satisfies the Provincial Board of Inspectors, and (3) the teachers are paid in accordance with a prescribed scale. Curricula are regarded as being as of essential importance, and as much a matter for expert deliberation and advice as is the medical treatment of patients in a hospital a matter for the physicians or surgeons concerned. Moreover, the Government treats the national provision of higher education as a whole, nearly as much as it treats the system of naval and military defence as a whole. It is thought that a locality cannot be any more safely left to be the final arbiter of the grades and types of the higher education to be supplied for its inhabitants than it can be allowed to decide what kinds of ships or guns shall be bought out of the quota of taxes which it contributes to the naval or military budget.

Thus it is evident that the German system of secondary education is at all points homogeneous and consistent. But it rests on a form of social organisation which (so far as the past history of English educational institutions may be regarded as throwing light on their future) would be unlikely to prove congenial to English temper.* Nevertheless, whatever view may be taken of

* The Report of the Deputation, appointed by the Technical Instruction Committee of the City Council of Manchester to visit Technical Schools, Institutions and Museums in Germany and Austria, July and August, 1897, contains the following paragraph:—

"Referring once more to Germany, and especially to Prussia, your deputation cannot conceal their sense of the advantage, whatever may be the ultimate drawbacks, of a centralised bureaucratic administration, which, taking a careful survey of the educational and industrial needs, places the schools here and there as circumstances require, brings them into mutual relation, supplies ample means, and effectively assists without loss of time the industrial advance. Something may be lost of "freedom, variety, and elasticity," and that loss may ultimately be serious in its effect upon individual initiative, upon which we as a nation so confidently rely. Which is the better policy the future alone can determine. It may, however, be safely asserted that it is high time the effort was made in this country to give to our youth the educational advantages, general and special, which are enjoyed by their rivals abroad."

the machinery which produces the results, the *intellectual* product of German secondary education is a matter of material and growing concern to other countries. The point at issue is how far can England, with her looser organisation and freedom for individual enterprise, get from her secondary schools the kind of intellectual product which will enable her (so far as knowledge comes into the matter at all), to bear up against the pressure of the highly disciplined and well-organised knowledge, which is the outcome of the secondary education of some other countries.

Each system has its characteristic excellence, and also its characteristic weakness. The best tradition of English secondary education has been one of the most valuable elements in our national life. The characteristic excellence of the best English secondary education in the past has been its training and strengthening of the will. Its characteristic weakness has been its comparative neglect of actual knowledge. Now, the best result of true education is the strengthening and right direction of the moral will. The play of the will should, indeed, be informed by knowledge. But the mere imparting of knowledge, however skilful the methods employed, has in itself no necessary influence upon the will at all. It may, indeed, merely confuse its aim, or even paralyse its former power. What does communicate power to the will is an intense belief in something, springing up in the heart by a sort of secret growth or communicated to the pupil by the infectious personality of a teacher, himself dominated by such intense belief. This is the reason why very great educational influence has often been exerted by comparatively ignorant men. But, behind any such influence, there must be (instinctively known or consciously thought out) a definite theory of conduct. It follows from this that all the higher sides of education are greatly, though not always immediately, affected by any fall in the temperature of belief. It will be admitted that, during the last generation, many have suffered a weakening of assurance as to the source of the obligations which determine conduct. This cannot but affect education on its higher sides. For a season, indeed, the momentum of the old times carries things on: old men linger at their posts and maintain the old ways. The traditional life of the school, especially of the boarding-school, exerts a subtle influence, and but slowly yields to new ideals. But there may come a time of stress and trial, when the school is challenged to show proof of its excellence. And it may then be slowly realised that its true excellence lay in its vital influence on character, and that some of the sources of that influence have, from no fault of its own, run dry. Tested by exacting standards of intellectual attainment, the school may then even ludicrously fail—so ludicrously indeed as to show that any such test, if *employed alone*, is no true measure of educational power. Nevertheless, the changed conditions of national and international life may, in the meantime, have rendered knowledge a more essential accompaniment of moral effort than it was before. And thus demands may be made, and rightly made,

upon the schools for a higher standard of intellectual efficiency, failure to reach which may have been previously a venial matter and almost unobserved. But merely intellectual efficiency will not touch the springs of conduct, nor revive the inherent power of the will. For that, another influence is needed, which does not come with observation. And, therefore, as the wind bloweth where it listeth, ought not schools to be given freedom, in order that they may be open to every breath of noble influence and reviving power?

There is much to be said for the view that, if the best sides of the English system of secondary education could be combined with the best sides of the German, the result would be the best system in the world. But such a combination would, of all combinations, be perhaps the most difficult to make. Yet there seems to be nothing in the nature of things to make such a combination impossible.

Summer 1898. MICHAEL E. SADLER.

CURRICULA

AND

PROGRAMMES OF WORK

FOR

HIGHER SCHOOLS IN PRUSSIA.

TABLE OF CONTENTS.

PAGE

Introductory Circular from the Prussian Minister of Education - - 255

I. Time Tables :—

Gymnasia - - - - - - - - - - - - 256

Realgymnasia - - - - - - - - - - - 258

Oberrealschulen - - - - - - - - - - - 259

Realschulen - - - - - - - - - - - - 260

II. Programmes of Work :—

Religious Instruction (Protestant) - - - - - - 262

„ „ (Catholic) - - - - - - - - 265

German - - - - - - - - - - - 268

Latin - - - - - - - - - - - - 272

Greek - - - - - - - - - - - - 278

French - - - - - - - - - - - - 280

English - - - - - - - - - - - - 281

History - - - - - - - - - - - - 286

Geography - - - - - - - - - - - 293

Mathematics - - - - - - - - - - - - 295

Natural Sciences - - - - - - - - - - - 301

Drawing - - - - - - - - - - - - 307

Gymnastics and Drilling - - - - - - - - - 309

Points of View for the Regulation of Homework - - - - 311

III. Explanations and practical directions for carrying out the Time Tables and Programmes of work :—

	PAGE.
1. Statistics of Leaving Certificates	313
2. Variations in Time Tables	314
3. Completion of the Course of Training in IIb	314
4. Religious Instruction	314
5. German	316
6. Latin	316
7. Greek	317
8. French	318
9. English	318
10. History and Geography	318
11. Mathematics and Natural Sciences	319
12. Drawing	319
13. Gymnastics and Drilling	319
14. Polish	320
15. Overwork	320
16. Books, and other Materials	320
17. Homework	320

CURRICULA AND PROGRAMMES OF WORK FOR HIGHER SCHOOLS IN PRUSSIA, *together with* EXPLANATIONS AND PRACTICAL DIRECTIONS. Berlin 1896.*

BERLIN, *January* 6, 1892.

I herewith send to the Royal School-Council of each Province, partly for their own use and partly for distribution among the staffs of teachers in their provinces copies of: —

I. "Curricula and Programmes of Work for Higher Schools," together with "Points of View for the Regulation of Home-work."

II. "Order of examination for higher certificates in Higher Schools," and "Order of examination for the certificate of having attained the standard of the sixth-year course in the Higher Schools with nine stages," as well as "Explanations and Practical Directions for carrying out I. and II." and the accompanying "Memorandum"; and I desire that, in accordance with the "Explanations and Practical Directions," the Curricula shall be uniformly introduced in all higher schools at the beginning of the school year 1892-93 (except in the case of schools which have alternative classes beginning at Michaelmas, where they are to be introduced in the beginning of the winter half-year 1892), and that the order of examination for higher certificates and for the certificate of having attained the standard of the sixth-year course shall be introduced at the end of the school year 1892-93 (except in the case of schools which have alternative classes beginning at Michaelmas, where they are to be introduced at the end of the summer half-year 1893).

The special programmes of work and points of view for the regulation of home-work included in I. are only to be considered as officially recognised data for the carrying out of the Curricula, but they are compulsory in so far as they contain definite instructions regarding the general aim in each individual subject, the standard of work in each class, and the description and amount of home-work, as well as the methods of teaching which are to be adopted.

All previous directions which are opposed to the regulations in I. and II. (with the exception of the directions for Catholic religious instruction) cease to be in force after the above-mentioned dates, especially the "Revised Curricula for Higher Schools" of March 31, 1882, and the "Order of Examination for Higher Certificates in Higher Schools" of May 27, 1882, as well as the "Explanations and Supplement" attached to them, which are contrary to the present instructions.

The Royal Provincial School Council is required at once to take the necessary steps for carrying out the directions contained in I. and II., and particularly to enter upon the necessary negotiations with the governing bodies of town and endowed schools.

I look for a report on June 1, 1892, of what has been done up to that time.

The documents in I. and II. are to bear the date of the present decree.

MINISTER FOR ECCLESIASTICAL AND EDUCATIONAL AFFAIRS.
Graf von Zedlitz.

To the Royal School-Council in every Province.

(Unterricht II., No. 3,373.)

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* Translated by Mr. W. G. Lipscomb, M.A., Assistant Master at University College School, London.

I.—GENERAL TIME TABLES.

A.—Time Table for Gymnasia (Classical Schools).

— —	VI.	V.	IV.	IIIB.	IIIA.	IIB.	IIA.	IB.	IA.	Total.	Compared with formerly.
Religion	3	2	2	2	2	2	2	2	2	19	± 0
German and Historical Narration.	3 / 1 } 4	2 / 1 } 3	3	2	2	3	3	3	3	26	+ 5
Latin	8	8	7	7	7	7	6	6	6	62	— 15
Greek	–	–	–	6	6	6	6	6	6	36	— 4
French	–	–	4	3	3	3	2	2	2	19	— 2
History and Geography. }	2	2	2 2	2 1	2 1	2 1	3	3	3	26	— 2 *See* German.
Arithmetic and Algebra. }	4	4	4	3	3	4	4	4	4	34	+ 0
Natural History. }	2	2	2	2	–	–	–	–	–	8	— 2
Physics, Elements of Chemistry, and Mineralogy. }	–	–	–	–	2	2	2	2	2	10	+ 2
Writing	2	2	–	–	–	–	–	–	–	4	+ 0
Drawing	–	2	2	2	2	–	–	–	–	8	+ 2
Total –	25	25	28	30	30	30	28	28	28	252	— 16

Remarks.

A. To these hours are added, as (generally) obligatory, drilling and gymnastics three hours* a week in each class from VI. to IA, and singing two hours a week in VI. and V. As these are not to be looked upon as actual working hours, they are not taken into consideration above.

Exemption from drilling and gymnastics is only granted on the authority of medical certificates, and, as a rule, only for half a year.

Boys with a gift for singing, unless in individual cases exempted on the authority of medical certificates, as in VI. and V., are bound also to take part in chorus singing in IV.—IA.

B. Arrangements have been made in all Gymnasia and Progymnasia for the continuation of drawing for two hours a week in each class up to the highest; also for English or Hebrew in each class from IIA to IA. Intimation of the intention to learn either of these languages obliges pupils to continue the subject for at least half a year.

As regards the protection of individual pupils from over-strain occasioned by taking part in voluntary subjects, see III. "Explanations" 15.

C. Respecting the separation of IIIB, IIIA, and IIB, IIA in schools where these classes are still taught in the same room, see III. "Explanations" 1.

D. The brackets against German and Latin imply that these two subjects are to be entrusted as much as possible to the same teacher.

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* "Stunde" is translated throughout by "hour." The official Stunde is a lesson of 50 minutes' duration.

B.—Time Table for Realgymnasia (Modern Schools with Latin).

—	VI.	V.	IV.	IIIb.	IIIa.	IIb.	IIa.	Ib.	Ia.	Total.	Compared with formerly.
Religion	3	2	2	2	2	2	2	2	2	19	+ 0
German and Historical Narration.	3 } 4 / 1 }	2 } 3 / 1 }	3	3	3	3	3	3	3	28	+ 1
Latin	8	8	7	4	4	3	3	3	3	43	—11
French	–	–	5	5	5	4	4	4	4	31	— 3
English	–	–	–	3	3	3	3	3	3	18	— 2
History and Geography	2	2	2 2	2 2	2 2	2 1	3	3	3	28	— 2 *See* German.
Arithmetic and Algebra.	4	4	4	5	5	5	5	5	5	42	— 2
Natural History.	2	2	2	2	2	2	–	–	–	12	± 0
Physics	–	–	–	–	–	3	3	3	3	12	+ 0
Chemistry and Mineralogy.	–	–	–	–	–	–	2	2	2	6	– 0
Writing	2	2	–	–	–	–	–	–	–	4	+ 0
Drawing	–	2	2	2	2	2	2	2	2	16	— 2
Total	25	25	29	30	30	30	30	30	30	259	— 21

Remarks.

A. To these hours are added, as (generally) obligatory, drilling and gymnastics three hours a week for each class from VI. to Ia, and singing two hours a week in VI. and V. In other respects, drilling and gymnastics, and singing, as in A. Gymnasium.

B. Respecting the separation of IIIb, IIIa, and IIb, IIa, the same holds good as for A. Gymnasium.

C. For the brackets against German and Latin, see A. Gymnasium. By combining the natural science subjects in the hands of one teacher it is intended to render it possible occasionally to devote to one of them the hours assigned to both.

C.—TIME TABLE FOR OBERREALSCHULEN (Modern Schools without Latin.)

—	VI.	V.	IV.	IIIB.	IIIA.	IIB.	IIA.	IB.	IA.	Total.	Compared with formerly.
Religion	3	2	2	2	2	2	2	2	2	19	± 0
German and Historical Narration.	4 / 1 } 5	3 / 1 } 4	4	3	3	3	4	4	4	34	+ 4
French	6	6	6	6	6	5	4	4	4	47	— 9
English	–	–	–	5	4	4	4	4	4	25	— 1
History and Geography.	2	2	2 / 2	2 / 2	2 / 2	2 / 1	3	3	3	28	— 2 *See* German
Arithmetic and Algebra.	5	5	6	6	5	5	5	5	5	47	— 2
Natural History.	2	2	2	2	2	2	–	–	–	12	— 1
Physics	–	–	–	–	2	2	3	3	3	13	— 1
Chemistry and Mineralogy.	–	–	–	–	–	2	3	3	3	11	+ 2
Writing	2	2	2	–	–	–	–	–	–	6	± 0
Freehand Drawing.	–	2	2	2	2	2	2	2	2	16	— 8 *See* Remarks A.
Total -	25	25	28	30	30	30	30	30	30	258	— 18

Remarks.

A. To these hours are added, as (generally) obligatory, drilling and gymnastics for each class from VI. to IA, and singing two hours a week in VI. and V. In other respects, drilling and gymnastics, and singing, as in A. Gymnasium.

Besides this, linear drawing is taught as an optional subject for two hours in Classes IIIA to IA.

B. Respecting the separation of IIIB, IIIA, and IIB, IIA, the same holds good as for A. Gymnasium.

C. For the brackets against German and French see A. Gymnasium. By combining the natural science subjects in the hands of one teacher it is intended to render it possible occasionally to devote to one of them the whole of the time allotted to the other also.

D.—Time Table for Realschulen.

The Time Table for the Oberrealschule holds good for these schools from VI. to IIb inclusive, provided that the completion of the programme for the higher stage is not interfered with.

How far it is possible in consideration of local needs to alter this Time Table, with the object of increasing German in VI.—II. inclusive, and correspondingly reducing arithmetic and mathematics and perhaps natural science or else French in the respective stages, is left to the decision of the supervising authorities. The number of hours per week in the individual classes must not thereby be increased. One of the possible forms of such a programme is given in D[1].

D[1].—Another Form of Time Table for Realschulen.

—	VI.	V.	IV.	III.	II.	I.	Total.	Compared with Formerly.	—
Religion.	3	2	2	2	2	2	13	± 0	
German and Historical Narration.	5 + 1 = 6	4 + 1 = 5	5	5	4	3	28	+ 7	
French.	6	6	6	5	4	4	31	— 9	
English.	–	–	–	5	4	4	13	± 0	
History and Geography.	2	2	2 2	2 2	2 1	2 2	19	— 3	*See* German
Arithmetic and Mathematics.	4	4	5	5	5	5	28	— 1	
Natural History.	2	2	2	2	2	–	10	— 3	
Natural Philosophy.	–	–	–	–	3	5	8	+ 0	
Writing.	2	2	2	–	–	–	6	— 2	
Freehand Drawing.	–	2	2	2	2	2	10	— 2	*See* Remarks A.
Total	25	25	28	30	29	29	166	— 13	

Remarks.

A. To these hours are added, as (generally) obligatory, drilling and gymnastics three hours a week for each class from VI. to I., and singing two hours a week in VI. and V. In other respects, drilling and gymnastics, and singing, as in A. Gymnasium.

Besides this, linear drawing is taught as an optional subject for two hours in Classes III.—I.

B. For the brackets see A. Gymnasium and C. Oberrealschule.

Appendix to A—D.

I. The preliminary course of instruction up to IIB in the Gymnasium (in which Greek is not generally compulsory and can be supplanted by English) is allowed to stand for the present. This course, and in connection with it the higher course of the Gymnasium or of the Oberrealschule, needs no special time table. On the contrary, the time table of the Gymnasium (apart from the said alteration in the matter of Greek and English) or, from IIA onwards, the time table of the Oberrealschule, following upon that of the Gymnasium, holds good. The approval of the supervising authorities is necessary for the introduction of this form.

2. For the connection between the Realgymnasium and the (non-Latin) Realschule the time table of the Realgymnasium and the Realschule, according to the so-called Altona system, can be left for the present, provided that the number of hours per week in the separate classes does not exceed that of the Realschule and the Realgymnasium, that consequently the number of hours for separate subjects is correspondingly reduced, and that drilling and gymnastics are increased as provided for. For drawing in the Realschule the same regulations hold good as for D'. For the introduction of this form the approval of the supervising authorities is necessary.

II.—SPECIAL SUBJECTS.

1.—RELIGIOUS INSTRUCTION.

PROTESTANT RELIGION.

Preliminary Remarks.—The aim, programme of work, and notes on method are substantially the same for corresponding grades in all kinds of higher schools.

A. General Aim.

The Protestant religious instruction in higher schools, supplemented by the general moral influence of the school, aims at bringing up the young in God's Word, and fitting them to set a good and active example in the future, both by their religious and everyday life and by their participation in the life and work of their parish.

B. Programme of Work.

VI.—Three Hours a Week.

Old Testament narratives from a reading book. Before the principal festivals, New Testament narratives relating to them.

Catechism: 1st section to be explained and learnt with Luther's Commentary, simple explanation of the 2nd and 3rd sections without Luther's Commentary.

Committing to memory a moderate number of texts from the Catechism and of four hymns in immediate connection with Church festivals.

V.—Two Hours a Week.

New Testament narratives from a reading book.

Catechism: Revision of the programme of the previous class; explaining and committing to memory the 2nd section with Luther's Commentary.

Texts from the Catechism and hymns, as in VI. Hymns already learnt to be revised, and four new ones committed to memory.

IV.—Two Hours a Week.

General outline of the divisions of the Bible and the names and order of the books of the Bible. Practice in looking out texts.

Reading of important portions of the Old and New Testaments as an aid to the revision of Bible narratives.

Catechism: Revision of the programmes of VI. and V. Explaining and committing to memory the 3rd section with Luther's Commentary and Bible texts; 4th and 5th sections to be learnt by heart. Texts from the Catechism as in previous classes, and revision of what has already been learnt.

Hymns learnt in VI. and V. to be revised, and four new ones learnt.

IIIb.—Two Hours a Week.

The Kingdom of God in the Old Testament: Suitable extracts from the Bible, as well as Psalms and passages from the Book of Job, in

illustration of the same. Revision of the Catechism learnt in VI., V. and IV., as well as the texts learnt in connection with it.

Hymns already learnt to be revised, and some (2—4) of the more valuable stanzas of modern hymns.

Instruction in the Church Year and the meaning of the Order of Divine Service.

IIIa.—Two Hours a Week.

The Kingdom of God in the New Testament: Suitable extracts from the Bible to be read in illustration. Careful study of the Sermon on the Mount and parables.

Thorough revision of the Catechism already learnt, and of the texts and hymns learnt in the former classes. Explanation of a few Psalms.

History of the Reformation in connection with a Life of Luther.

IIb.—Two Hours a Week.

Bible reading to supplement and complete the portions read in IIIb and IIIa. Explanation of one of the synoptic gospels.

Revision of the Catechism, and explanation of the relation of its parts to each other.

Revision of texts, hymns, and Psalms.

IIa.—Two Hours a Week.

Explanation of the whole of the Acts of the Apostles. Other selections from books of the New Testament to be read.

Revision of Catechism, texts, and hymns.

Ib.—Two Hours a Week.

Church history, so far as this is of immediate importance for the religious training of the younger members of the Protestant Church: The Petrine period (Judenchristentum), the Pauline conception of the person and work of Christ, St. Augustine, Pelagius, the growth of the Roman Catholic Church, the Reformation and events that led up to it, development of the Protestant Church in its more important directions (Pietism, Moravian Brethren, Spener, Wichern), also modern sects, such as Methodists, Baptists, Irvingites.

Explanation of New Testament Scriptures: The Gospel of St. John and the easier Epistles (Epistle to the Galatians, to the Philippians, Epistle of James, First Epistle to the Corinthians, Epistle to Philemon). In this Class and in Ia reference to be made occasionally to the original text.

Ia.—Two Hours a Week.

Elements of Faith and Morals in the form of an explanation of Articles I.—XVI., XVIII., and XX. of the Augsburg Confession, after a short previous dissertation on the three Creeds.

Explanation of New Testament Scriptures: The Epistle to the Romans and other Epistles from the selection given in Ib.

c. Notes on Method.

In the new arrangement of the programme of Religious Instruction the matter to be committed to memory has been cut down as far as possible in order that the moral side of the instruction may come prominently forward. In religious instruction chief stress is to be laid upon a living acceptance and real assimilation on the part of the pupil

of the truths of salvation and the duties of a Christian; and religious instruction is to be limited so far as it is of a historical nature to those incidents which are of lasting influence upon the religious life of a member of the Church.

In no branch of instruction is it so true as in this, that the primary condition of success lies in the living personality of the teacher and 'n his speaking out of the fulness of his heart. But even where this primary condition is fulfilled there must be no lack of skill to enable the teacher, by the simplicity and clearness of his exposition and questioning, to adapt himself to the age of his pupils and to make his subject clear and keep it within the pupils' powers of comprehension. The limitation of the amount to be committed to memory renders it more possible, by frequent repetition, to secure for the pupil as an abiding possession in after life the hymns, Scripture texts, and portions of the Catechism which he has learnt by heart.

The work prescribed for the earlier stage is the Bible history of the Old and New Testaments in appropriate selections and by means of a suitable reading book, the learning by heart of hymns adapted to this standard, and the Lutheran Catechism. The teacher should endeavour to bring all the different parts of this scheme into living relation to each other.

In the intermediate stage the knowledge of the Catechism is to be firmly secured. The stock of hymns and texts is to be revised and extended, and a general survey of the history of the Kingdom of God, as set forth both in the Old and the New Testament, is to be given. At this stage elementary instruction is to be given in the Church Year and in the Order of Divine Service, as well as an interesting account of the Reformation, especially in connection with the person of Luther. The intermediate stage is completed in the sixth year's course, when a synoptic Gospel is read and explained as an aid to a comprehensive grasp of the life of Christ.

In the higher stage the knowledge of the New Testament Scriptures is extended over the range indicated in the separate programmes of work. The teacher is to be given a free hand in the selection of details, taking account, among other things, of the attainments of his pupils. The reading of the Acts of the Apostles, prescribed for IIA, serves as an introduction to Church history.

Church history in the highest class must only be taught in its most essential points, and everything that is not of immediate importance for the religious training of the younger members of our Church must be carefully excluded. It must, therefore, be substantially restricted to the description of the early Christian Church, the Reformation and events that led up to it, and the most important religious manifestations of modern times.

Faith and Morals are not taught according to a system and text book, but in connection with the Gospels and Apostolic writings and the Augsburg Confession, Articles I.—XVI., XVIII., and XX. especially of the latter being explained after a short introductory dissertation on the three Creeds.

Even in the highest class of the Gymnasium the *German* text is in general to be mainly used in reading the New Testament. But the Greek text may be employed, at any rate occasionally, in order to lead the pupil to refer to the original text. Care, however, must be taken that the instruction shall not thereby acquire a philological character to the detriment of its main object.

Of the so-called introductory sciences (Einleitungswissenschaften) to the books of the Bible as little as possible is to be given. Critical enquiries into this subject do not fall within the province of the school.

CATHOLIC RELIGION.

Preliminary remarks: The aim, programme of work, and notes on method are substantially the same for corresponding grades in all kinds of higher schools.

A. General Aim.

Instruction in the Catholic Religion in higher schools should be an essential part of the general organisation of the school, not holding a separate or isolated position, but closely bound up in active correlation with all branches of the school work which aim at culture and education. Its special mission is to make the younger members of the Catholic Church, according to the standard of their intellectual development, acquainted with the doctrines and precepts as well as with the inward and outward life and work of their Church, to strengthen them in the conviction of the truth and Divine origin of Christianity and of the Church, and to guide them faithfully to preserve their conviction, diligently to foster it, and ever inviolably to acknowledge it by living in and with Christ and His Church.

B. Programme of Work.

VI.—Three Hours a Week.

The necessary prayers; brief directions to hear Holy Mass devoutly. Instruction in Confession, or brief revision of what has already been given, as the case may require. Catechism: The first section, on Faith. Bible stories from the Old Testament, out of a Bible history.

V.—Two Hours a Week.

Catechism: The second and third sections, on the Commandments and on the Means of Grace. Bible stories from the New Testament to the Resurrection of Christ, out of a Bible history.

IV.—Two Hours a Week.

Longer Catechism: The first section, on Faith. Bible history: Conclusion of the New Testament, together with a fuller and more detailed revision of the whole Bible history of the New Testament, especially the period of the public teaching of Jesus, from a Bible history. Some hymns to be explained and committed to memory.

IIIb.—Two Hours a Week.

Longer Catechism: The second section, on the Commandments. Explanation of the Church Year, in connection with the first commandment of the Church. Bible history: Fuller and more detailed revision of the history of the Old Testament, specially emphasising its preparatory, prophetical, and typical character, both in individual prominent

personages and in events and religious institutions. New hymns to be explained and committed to memory, including some Latin hymns.

IIIA.—Two Hours a Week.

Longer Catechism: The third section, on the Means of Grace, with references to the ceremonial at the Holy Sacrifice of the Mass, at the giving of the Holy Sacraments and the Sacramentals. Elements of Church history by means of famous characters in Church history.

N.B.—A suitable manual can be used in place of the Longer Catechism.

IIB.—Two Hours a Week.

Proof of the Catholic Faith (Apologetics). Doctrine of natural religion, of the Divine revelation and the stages of revelation (patriarchal revelation, Judaism, and Christianity), the doctrine of the Church, of the origin of the Christian Faith, and of the Catholic Rule of Faith, from a manual. Revision of the most important parts of the programmes of work for the middle stage.

IIA.—Two Hours a Week.

The doctrine of Faith concerning God, Creation and Redemption, from a manual. Besides the distinguishing doctrines of the Catholic Church, those points of doctrine which, in the presence of the prevailing ideas of the time, appear to need defending must be treated at length. Fairly full excerpts from Church history to the time of Charlemagne, principally by means of sketches of persons or epochs, Church institutions, and the like, in connection with a manual.

IB.—Two Hours a Week.

Conclusion of the doctrine of Faith, Sanctification and Perfection, from a manual, according to the programme for IIA. Excerpts form the Church history of the middle ages and modern times in the manner prescribed in the programme for IIA.

IA.—Two Hours a Week.

General and special morals, from a manual. This should be taught especially with a view to the refutation of those tenets and aspirations of the present day which are dangerous to moral life and to social order. Comprehensive revision of the programmes of the higher classes.

N.B.—When an alteration in the above programmes is necessary owing to peculiar circumstances, especially through several classes having to be taken together, the teacher will do his utmost, by increased zeal and educational skill, to overcome the disadvantages which unavoidably arise from such circumstances, and will endeavour, all the same, in the course of the school period to cover the whole of the ground prescribed.

If the arrangements of the school require it, Church history alone can be taken in IIA, and Faith and Morals can be reserved for IB and IA.

C. Notes on Method.

In all classes religious education depends first and foremost upon the exposition, explanation, and proof of the orthodox Church doctrine. Speaking generally, controversial points of view must not be introduced, even incidentally, into the course of study before IIB, and even then

only in so far as they are required to refute such errors as already come under the immediate observation of the pupil, or are likely so soon to press themselves upon his attention that they cannot be left unnoticed and unrefuted. At the same time attention must repeatedly be drawn to the importance of discussing the objections of antagonists, and pupils must be emphatically reminded that the infallible authority—which has already been assumed as an axiom—of the Church of Jesus Christ, under the guidance of the Spirit of God, is a full and reliable surety for the Christian faith. In regard to the amount to be committed to memory, the new arrangement of the programmes makes complete provision and gives the necessary directions for the work of the lower and intermediate stages. Only in IIB and in the higher stage is the teacher left to work out for himself the details of the scheme which is there given merely in general outline.

The aim of religious teaching can only be attained by a sure foundation of sound religious knowledge, faithful conviction, and loyalty to the Church, and by this means alone can it be hoped to carry out the other, and that not the least and most unimportant, part of its purpose, viz., to bring about in a thorough and lasting manner the religious education and moral improvement of the pupil. In this the personal example of the teacher is of special importance.

Faith and Morals are treated in three successive courses, corresponding exactly to the division into three stages of the schools with nine year courses—each time in more extended form and in greater detail. The knowledge which the pupils have acquired in non-religious branches of study is to be turned to account as much as possible in their religious instruction. In the interest of the pupils who are leaving school after having gone through IIA, the most important work prescribed for this class is a popular exposition of the proof of the Roman Catholic faith. Herein the chief weight is to be laid upon the doctrine of the Church; for, according to Roman Catholic doctrine, the real moral life rests upon obedience to the Church as the accredited defender and interpreter of the Divine ordinances, and therein lies a special protection against the perverse tendencies of the present day, which are dangerous to moral order.

Just as instruction in Faith and Morals must always be based upon Bible history, so the teaching of Bible history must go hand in hand with the inculcation of doctrinal truths and moral precepts. To this end it is desirable that in the higher stage instruction in Faith and Morals should, so far as time and opportunity allow, be combined with the reading or narration of short selected portions of the Holy Scriptures, e.g., the Sermon on the Mount or selected parables or incidents from the life of Christ.

The introduction to Church history in the middle stage is followed by a fuller study of the subject in the higher stage—in both cases principally in the form of portraits. The chief aim is not to present to the pupils and fix in their memory the greatest possible mass of details; but to teach them to reverence and love the Church, and to make them see in its history, above all, the unfolding of a design of Divine providence. The application and importance of this subject from an educational point of view follows naturally.

2.—GERMAN.

Preliminary Remarks: The aim, programme of work and notes on method are substantially the same for the corresponding grades in all kinds of higher schools.

A. General Aim.

Readiness in the correct oral and written use of the mother tongue, acquaintance with the most important sections of the history of our poetry in connection with what the pupils are reading, and awakening of the sense of patriotism, especially by an introduction to Germanic legend and such masterpieces of our literature as are of most value for school purposes.

B. Programme of Work.

VI.—Four or Five Hours a Week.

Grammar: Parts of speech and structure of the simple sentence. Differences between strong and weak inflection. (Terminology throughout the same as in Latin.)

Exercises in spelling by means of weekly dictations in class.

Reading of poems and pieces of prose (fables, fairy tales, stories from the legends and history of the native land).

Oral reproduction of stories related in class. Learning by heart and intelligent recitation of poems.

V.—Three or Four Hours a Week.

Grammar: The simple and extended sentence. Essentials of the compound sentence. Exercises in spelling and punctuation by means of weekly dictations in class.

Oral reproduction of stories. First attempts at written reproduction, in the first half-year in class, in the second half-year as home work.

Stories from the ancient legends and history. In other respects as in VI.

IV.—Three or Four Hours a Week.

Grammar: The compound sentence. The rudiments of word formation, illustrated by typical examples.

Exercises in spelling in class, alternately with freer written reproduction of what has been heard in class (home work every four weeks).

Reading of poems and pieces of prose. Reproduction. Learning by heart and intelligent recitation of poems.

IIIb.—Two or Three Hours a Week.

Grammar: Comprehensive survey of the most important grammatical rules peculiar to the German language.

Home composition every four weeks in the form of narrations, descriptions, sketches, and translations from what is read in foreign languages.

Reading of prose and verse pieces (dealing with Northern and Germanic legends, universal history, the history of civilisation,

geography, natural history, as well as epic poetry, and particularly ballads). Notes on the characteristics of poetry, so far as is necessary for the proper interpretation of what is read. Learning by heart and recitation of poems as in lower classes.

IIIA.—Two or Three Hours a Week.

Home compositions as in IIIB, as well as accounts of personal experiences, sometimes in the form of a letter.

Readings in general as in IIIB, but with gradual diminution of prose and increase of verse readings. Lyric and dramatic poetry (especially Schiller's "Glocke" and "Wilhelm Tell"). Further notes on the principles of poetry and rhetoric based on what is read (indukti zu behandelnde Belehrungen). (In Modern Schools (Realanstalten) Voss's translation of Homer instead of the drama.) Learning by heart and recitation of poems and passages of poetry as in the earlier stages.

IIB.—Three Hours a Week.

Practical introduction to essay writing by exercises in class in finding out and arranging the subject matter. An easy essay (abhandelnder Art) every four weeks, especially comparisons as well as narrative descriptions or accounts of personal experiences as in IIIA, only wider in scope. Also translations from what is read in foreign languages.

Reading: "Jungfrau von Orleans" (in Modern Schools "Wilhelm Tell"), "Minna von Barnhelm," "Hermann und Dorothea." The explanation should aim in the simplest manner possible at making the pupil grasp the whole as one perfect and complete work of art. Learning by heart of passages of poetry, and first attempts on the part of the pupils to give *viva voce* short original criticisms on what they have read.

IIA.—Three or Four Hours a Week.

Essay writing at home and in class. Short papers on subjects chosen from the intellectual range acquired by the pupil in the course of instruction. About eight essays in the course of the year.

In addition—

1. Introduction to the "Niebelungenlied," with specimens from the original text read and explained by the teacher. A cursory glance at Northern legends and the great Germanic legendary world, at the chivalrous epics and lyrics (Tristan, Parzifal, etc.). Occasional lessons on philology by means of typical examples.
2. Comprehensive revision of the different kinds of poetry.
3. Readings of dramas (e.g., "Wallenstein," "Egmont," "Götz").
4. Occasional learning by heart of passages of poetry. Preparation and delivery by pupils of *viva voce* reviews of the substance of important Middle High German poems or modern dramas and other poems that have been read.

IB.—Three or Four Hours a Week.

Essay writing at home and in class as in IIA.

In addition—

1. Portraits from the history of German literature from the beginning of the 16th to the end of the 18th century, given concisely.
2. Reading: Lessing's critical treatises ("Laokoon"); a few odes of Klopstock; Schiller's and Goethe's philosophical lyrics. In addition—dramas, especially "Iphigenie," "Braut von Messina" (in Modern Schools also translations of Sophocles' tragedies). Specimens of modern poetry.

3. *Viva voce* reviews by the pupils of the lives and works of poets, as in IIA. Harder selections from a reading book for I. can, under certain circumstances, takes the place of the prescribed prose readings in this class and in IA.

IA.—Three or Four Hours a Week.

Essay writing at home and in class, as in IIA and IB.

In addition—

1. The lives of Schiller and Goethe and their most famous contemporaries, as well as of the more important modern poets.

2. Readings taken from the "Hamburgische Dramaturgie," in addition to the readings of dramas, and especially of Shakespeare in a translation (in the Classical Schools, Gymnasia).

3. Preparation and delivery by pupils of *viva voce* reviews of the lives and works of poets.

C. Notes on Method.

For the relation of German to the other subjects of instruction, see III. "Explanations, etc.," 5.

Grammatical instruction in the mother tongue has been retained in order to give the pupil a definite standard whereby he may judge his own and other people's diction, and to guide him afterwards in cases of doubt. This instruction must, however, be limited to what is strictly necessary, and must always rest upon definite examples. German grammar must no longer be treated in the same way as the grammar of foreign languages in German higher schools.

Materials for the graduated exercises in writing are to be taken from the subjects being taught. It is not, however, intended to preclude essays on matters of more general scope from being set in the higher classes, in so far as sufficient preparation for them can be expected to have been acquired from the general instruction. Themes based upon the reading are recommended, particularly in the higher classes. Teachers must, however, be particularly warned against the danger of making excessive demands upon pupils, especially in reference to the scope of these tasks.

On the question of utilising for the teaching of German translation from foreign languages and short compositions on what has been learnt in other subjects, attention may be called to III. "Explanations, etc.," 5.

Guidance in the treatment of the subjects set is necessary in all stages, but it should be given in such a way that the pupils learn more and more, under the direction of the teacher, to find out the salient points and the arrangement of them for themselves.

Simplicity of style, especially in the structure of sentences, is to be insisted upon, and foreign constructions are to be rigidly excluded. Foreign words for which good German expressions can be found, and which render fully and exactly the same idea, are to be weeded out. Nevertheless, a reasonable discretion is essential on this point, so as not to afford an opening to arbitrary pedantry; and it is advisable that special rules on this subject should be established for each school.

Careful attention is to be paid to the cultivation of good oral expression in all subjects and in all stages. But, above all, the teacher himself must set a good example. Any carelessness in this respect exercises a prejudicial influence upon the style of the pupils.

Intelligent expressive reading and recitation by the pupils must be

continually practised. Besides this the pupils in the higher classes at regular intervals prepare beforehand and deliver without notes short lectures on what they have read or heard. The lectures are afterwards criticised by the teacher of the class.

Moderation must be carefully observed in setting work to be learnt by heart, and the authorised selection of poems which has been introduced into most schools should be subjected to repeated scrutiny.

In the selection of subjects for reading, a distinction must be made between class reading and private reading. In the former the selection of something that can serve as a suitable type for the corresponding grade in all schools must be kept in view; in the latter special regard must be paid to the individuality of the pupil. In the lower and intermediate stages poems which are chosen for class work are in the first place to be read aloud and in good style by the teacher. Then the necessary explanations, both of the language and of the substance, are to be given, and the principal incidental ideas are to be brought out by the teacher and pupils together. The poem is then read aloud by one of the pupils, and afterwards set to be learnt, so that it may be recited and thoroughly discussed in the next lesson. Even in the reading of longer works in the higher classes the leading ideas are to be sought out with the help of the pupils, the main sections and their systematic arrangement are to be shown, and in this way the work is to be made clear to the pupils as a *whole*. Attention is at the same time to be paid to the artistic form of the work. A comparison of different poems which treat of the same subject is especially to be recommended. The construction of the epics and dramas read, as well as the characters of the persons that occur in them, are to be brought thoroughly within the comprehension of the pupils.

The prose reading, which is in all stages to be cultivated side by side with the poetry, is intended to widen the ideas and views of the pupil, and especially in the higher stage to offer material for the discussion of important conceptions and ideas on matters of general interest. Under apt guidance, this reading can in the highest class take the place of the introduction to philosophy, which is often studied with so little profit, and which is not included in this programme as a special subject.

For the treatment of Middle High German, see B. Programmes of Work.

The teacher must always be ready to assist the pupil with advice in the suitable choice of books for private reading, and he must endeavour above all to awaken interest and pleasure in it.

Next to religion and history, German is the subject which is of the greatest moral importance in the organic life of our higher schools. The task assigned to it is one of peculiar difficulty, and the necessary conditions for its successful accomplishment are a thorough comprehension of our language and history on the part of the teacher, an enthusiastic admiration for the treasures of our literature, and a deep sense of patriotism, whereby he may be able to instil into the sensitive hearts of our young people enthusiasm for the German language, for the German people, and for the greatness of the German intellect.

3.—LATIN.

A. GYMNASIUM.

A. General Aim.

To enable boys to understand the more important classical writers of the Romans, and to give them a linguistic training.

B. Programme of Work.

VI.—Eight Hours a Week.

Accidence, strictly limited to what is regular, and exclusive of deponent verbs. Acquirement of an adequate vocabulary from the reading book as a preparation for the reading of authors.

Materials for the reader and exercise book are drawn mainly from Roman mythology and history, so that both the matter and language may serve as a first step towards reading Roman authors. The matter is as far as possible connected, and consists primarily and principally of Latin pieces and German readings corresponding to them. All the passages are construed in class, at first under the guidance and with the assistance of the teacher, but gradually more and more independently; then they are set to be translated again afterwards at home. Practice in construing and *re*translation. Regular exercises for oral and written practice in class are made up from the Latin and German pieces.

Elementary rules of syntax are taught indirectly from the text, *e.g.*, expressions of time and place, the ablative of the instrument, and the commonest conjunctions (*cum*, *quamquam*, *ut*, *ne*), and a few elementary rules about the order of words. Once a week for half an hour an exercise made up from what has been read is done in class without books. A fair copy of this exercise is to be made. Towards the end of the school-year special translations, prepared beforehand in class, can be set as home work instead of this exercise.

V.—Eight Hours a Week.

Revision of the regular accidence, deponent verbs, and the more important irregular forms of the accidence. Acquirement of a suitable vocabulary, as in VI. Words which do not occur in the reading book are not to be given.

Reader and exercise book, as in VI.

Rules of syntax drawn from the text as required, *e.g.*, accusative and infinitive, agreement of participles, ablative absolute, construction with names of towns, and a few necessary remarks on style. Oral and written exercises for practice in class, and fair copies, as in VI. Alternately with the latter, special translations, prepared beforehand in class, are set as home work.

IV.—Seven Hours a Week.

Reading (in the first half-year, three hours; in the second, four hours): "Cornelius Nepos," or a suitable reader. In the first half-year the reading is prepared in class. Diligent practice in construing, unseen translation and *re*translation.

Peculiarities of style, important idioms and synonyms (with their distinctions) to be learnt incidentally as they occur in reading.

Grammar (in the first half-year, four hours; in the second, three hours): Revision of the accidence. The most important rules on the use of the cases, illustrated by examples drawn as far as possible from the book that is being read. Syntax of the verb as far as necessary.

Oral and written translations into Latin from an exercise book containing passages akin to what is being read.

Once a week a short translation into Latin in connection with the reading, either in school or as home work. In addition, three written translations into German in the course of the half-year.

IIIB.—Seven Hours a Week.

Reading (four hours): Cæsar, 'Bell. Gall.'

Guidance in preparation. Careful and frequent practice in construing, unseen translation, and *re*translation. Peculiarities of style, etc., etc., as in IV.

Grammar (three hours): Revision of case syntax. Principal rules for the syntax of tense and mood. Method of instruction as in IV.

Oral and written translations into Latin from an exercise book founded on Cæsar.

Once a week a translation into Latin in connection with what has been read, either in school or as home work. Every six weeks, in place of this work in school, a written translation into German.

IIIA.—Seven Hours a Week.

Reading (four hours): Cæsar, 'Bell. Gall.'; Ovid, 'Metam.,' from an authorised selection. Guidance in translating in class. Explanation and practice of dactylic hexameters. Method of reading and exercises as in IIIB.

Grammar (three hours): Revision and amplification of the syntax of tense and mood. The remaining chief rules of the syntax of the verb.

Method of instruction, use of the exercise book, and written exercises, as in IIIB.

IIB.—Seven Hours a Week.

Reading (four hours): Easier orations of Cicero, selections from Livy and Virgil—the latter from an authorised selection, giving complete scenes and a general survey of the whole—or from Ovid.

Guidance in preparation. Practice in unseen translation and *re*translation. Learning by heart of some passages of poetry. Rules of style and distinction of synonymous words as they occur in reading.

Grammar (three hours): Revision and amplification. Every week a short translation into Latin in connection with what has been read, either in school or as home work. Every six weeks, in place of this work in school, a written translation into German.

IIA.—Six Hours a Week.

Reading (five hours): Livy and Sallust, with special regard to historical instruction; selected orations of Cicero; Virgil, from an authorised selection. Regular practice in unseen translation. Learning by heart some passages of Virgil. Rules of style, etc., as occasion demands, as in IIB.

Comprehensive review of the peculiarities of style, and revision of grammar in connection with what is read. Every fortnight a written

translation into Latin, alternately in school and as home work. In addition, every six weeks, a translation into German in school. As occasion arises, a Latin summary, solely as a digest of what has been read. (One hour.)

Ib.—Six Hours a Week.

Reading (five hours): Tacitus; selections from Cicero's letters and from Horace. Supplementary private reading—particularly from Livy. Regular practice in unseen translation. Learning by heart of some passages from Horace. Study of the necessary rules on style and synonymous ideas as they occur in the author.

Every fortnight a translation into Latin in connection with what has been read, alternately in school and as home work. At the same time, every six weeks, a translation into German in school. Revision of rules of grammar and style as they arise out of this written work. Summaries as in IIa. (One hour.)

Ia.—Six Hours a Week.

Reading (five hours): As in Ib, only, instead of Cicero's letters, one of the longer orations. Supplementary private reading—particularly Livy. Practice in unseen translation, etc., as in Ib.

Written work as in Ib. Summaries as in IIa. (One hour.)

B. REALGYMNASIUM.

a. General Aim.

To enable boys to understand the easier passages of the authors read in the highest class, and to give a linguistic training.

b. Programme of Work.

VI.—Eight Hours a Week.

As in the Gymnasium.

V.—Eight Hours a Week.

As in the Gymnasium.

IV.—Seven Hours a Week.

As in the Gymnasium.

IIIb.—Four Hours a Week.

Reading (two hours): Cæsar, "Bell. Gall.," or from a suitable reader.

Grammar (two hours): Revision of the accidence and amplification of the case syntax. Syntax of the moods, so far as is requisite for reading. Practice in written and oral translations from German.

IIIa.—Four Hours a Week.

Reading (two hours): Cæsar, "Bell. Gall." (selections).

Grammar (two hours): The most necessary part of the syntax of tense and mood. The rest as in IIIb. In addition, written and oral translations from German and Latin.

IIb.—Three Hours a Week.

Reading (two hours): Cæsar, "Bell. Gall." (selections); Ovid, "Metam.," from an authorised selection. Explanation and practice of dactylic hexameters.

Grammar (one hour): Revision of accidence and syntax as occasion arises in the written work to be done every fortnight. No exercise book is used. Written translations from Latin.

IIa.—Three Hours a Week.

Reading: Cæsar; Ovid, "Metam.," from an authorised selection.

Written work: Every fortnight a translation from Latin. In connection therewith revision of grammar as occasion arises.

Ia and Ib.—Three Hours a Week Each.

Reading: Simpler portions of Livy; Cicero, "In Catil," I., II., or III.; easier passages from Virgil's "Æneid," from an authorised selection, as in the Gymnasium.

Written work: Every fortnight a translation from Livy. In connection therewith revision of grammar as occasion arises.

c. Notes on Method.

A. GYMNASIUM.

1. Grammar, Vocabulary, and Written Exercises.—In accordance with the general aim, preparation for a thorough comprehension of the authors, and linguistic training are to be kept clearly in view in the directions denoted. From VI. upwards the selection of what is to be learnt and of the exercises is to be determined accordingly, and it must throughout be limited to what is normal. Grammar and the exercises in connection with it are, moreover, only to be treated as a means to the attainment of the end denoted.

In the choice of a grammar care must be taken not to let it differ too much in its general arrangement from the Greek grammar used in the same school.

Lower Stage.—It is in general not recommended that the earliest instruction in VI. should begin with *rules*, but with Latin sentences which are to be translated first by the teacher, and afterwards by the pupils. After a number of sentences, chosen with a definite end in view, have been practised, and the declensions explained from them, and afterwards collected and compared, then only are the rules which are to be committed to memory in each instance to be applied to them. The vocabulary to be acquired is taken from what has been read. Side by side with this preliminary preparation go oral and written exercises on what has been read and learnt, in the form of translations into German and Latin of variations of the sentences.

It is not advisable to add to the difficulties of the instruction by insisting too much on the niceties of pronunciation.

Intermediate Stage.—When once a good knowledge has been attained in VI. and V. of the commonest nouns and verbs, and of the rules of syntax most essential for translation, then in the intermediate stage systematic practice in the further necessary rules of syntax follows. Here, too, the method always to be adopted is to start with a number of model sentences illustrating the rules in point, and drawn as far as possible from what has been read, and then, after they have been

explained, to have them committed to memory. Special weight is to be attached to summarising equivalent and kindred forms as they occur, and to bringing special cases under the head of the general rule.

Vocabulary and oral or written exercises are to be amplified, always in connection with what is being read. The exercises in translation into Latin must, as a rule, be taken from an exercise book founded upon the prose author being read.

By an intimate connection of this kind between the individual parts of the instruction, and by the intellectual discipline arising from it, a thorough comprehension of the writers is ensured.

Higher Stage.—In the single hour that is assigned to grammar in the higher stage no more can be attempted than to secure the complete mastery of what has already been acquired, and occasionally to summarise and amplify what has already been learnt as an aid to the reading. Special peculiarities in the use of parts of speech, points of style, and synonyms are to be treated only as they arise in reading, and must be limited in moderation to what is essential and incontrovertible.

The pieces for translation into Latin to be done at home or in school, are, as a rule, to be composed by the teacher in connection with what has been read. They must be simple, and treated almost as mere *re*translations into Latin.

2. Reading.—The more thorough the grounding in grammar and vocabulary the fewer will be the interruptions arising from the explanation of formal difficulties, and the greater will be the attention paid in every case to the explanation of the matter itself. Any attempts to employ the methods of explaining grammar which have already been distinctly objected to in the "Explanations to the Curricula of 1882" are to be strictly discountenanced. The comprehension of the subject matter and the introduction to the intellectual life and civilisation of the Romans is the chief thing.

The importance—which is emphasised in the programmes of work—of preparation in class for the reading of new or more difficult authors must always be observed.

The best explanation is, and always will be, a good German translation of the author. This is to be worked out in class by the teacher and pupils together, and to be repeated by the pupils. In this way the mischief that arises from the use of printed translations will be most effectually prevented. The systematically graduated translations from Latin, written in class, are the best criterion of the degree of skill attained.

When certain portions or a complete work have been translated, a general survey of the subject-matter and of its systematic arrangement is to be taken with the pupil. At the same time, in the higher stage, not only the main ideas, but also the artistic form of the work are to be made clear to the pupil by the teacher. In authors or writings which cannot be read in full care should be taken to select passages which are connected with each other in subject-matter, and as far as possible to give a complete picture. Unseen translations, which are to be regularly practised, must be made to contribute to the completeness of this picture.

The reading of prose and verse side by side is, on the whole, not to be recommended.

A point of view which has hitherto been too little appreciated, and which, nevertheless, is of very great importance as regards the concentration of the instruction, is the close association of prose reading with history. While this holds good for German and all foreign languages, it does so especially for Latin. It becomes possible by this means, without

overburdening the historical instruction, to acquire a background enlivened by individual traits for important portions of history and conspicuous characters. Appropriate illustrations, such as are so plentifully afforded by imitations of ancient works of art and other representations of ancient life, cannot be too highly recommended.

The deposition of Cicero from its hitherto prominent position in school reading is rendered necessary by the alteration in the aim of instruction. The orations and letters to be read are to be treated first and foremost for their subject-matter.

B. REALGYMNASIUM.

As to the method of instruction in Latin in the Realgymnasia, the same remarks hold good as for the Gymnasia, the more limited aim and programme and the shorter time allowed for it being, of course, taken into consideration.

In III and IIb, in the Realgymnasia, the teacher is at liberty now and then to devote the whole time either to reading or to grammar and oral or written exercises. In I the whole time, apart from the written translations from Latin, is given to the author, and only occasionally are individual lessons to be applied to grammatical revision and summaries.

In the Realgymnasium, as well as in the Gymnasium, care must be taken to see that everything is thoroughly understood, and mere tentative guessing must be absolutely tabooed.

4.—GREEK.

A. General Aim.

To enable boys to understand the more important classical Greek writers.

B. Programme of Work.

IIIb.—Six Hours a Week.

The regular accidence of the Attic dialect up to liquid verbs inclusive. The most necessary rules of phonology and accents in connection with the declensions and conjugations. Learning by heart of words as far as they are necessary for the reading, special vocabularies which are not founded on the reading being excluded. Individual rules of syntax are to be drawn inductively from the reading.

Regularly once a fortnight from the very first there are to be, partly as home work and partly in school, oral and written translations into Greek in connection with the reading matter, to serve as practice in the accidence.

Reading from a suitable reader. The pupils begin reading at once, and pass on as soon as possible to connected pieces. The materials are to be taken from Greek mythology and history. Care is to be taken that only such words occur as are found regularly in the authors read in school, and that all irregular forms are omitted.

IIIa.—Six Hours a Week.

Verbs in -μι, and the most important irregular verbs of the Attic dialect. Prepositions to be committed to memory. Revision and amplification of the programme of IIIb. Selected general rules of syntax in connection with the reading, as in IIIb.

Oral and written exercises in translation into Greek of the same range and on the same principle as in IIIb; so, also, the learning of words, (In the first half-year three hours, in the second two hours.)

Reading: At first from the reading book, afterwards Xenophon's "Anabasis." Guidance in preparation. (In the first half-year three hours, in the second four hours.)

IIb.—Six Hours a Week.

Reading: Xenophon, selections from the "Anabasis" and "Hellenica"; also Homer's "Odyssey."

Homer is prepared during the first half-year in class. The Epic dialect is not systematically studied, but is practised by explanation and occasional recapitulation in reading. Suitable passages are learnt by heart. (Four hours.)

Grammar: The syntax of the noun (article, pronoun, case syntax), as well as the most essential general rules for the syntax of tense and mood. The syntax is gone systematically through as far as is necessary, while at the same time the rules that have already occurred are recapitulated and applied to examples. The accidence is revised and amplified as far as the prose reading requires it.

Written translations are set, as heretofore. Occasionally translations from Greek into German take the place of translations from German into Greek. (Two hours.)

IIa.—Two Hours a Week.

Reading: Selections from Herodotus, Xenophon's "Memorabilia," and Homer's "Odyssey."

The special study of the Ionic dialect and the rendering of Herodotus into Attic are to be omitted.

Learning by heart, as in IIb.

(Five hours.)

Practice in written translation from Greek, in conjunction with the reading of the prose author, once in four weeks, and, as a rule, in class.

In this stage the grammar is to be summarised and concluded. Further study of the syntax of tenses and moods, syntax of the infinitive and participle, chief importance being attached to the peculiarities of the Greek language. Practice in class of what has been learnt as an aid to the reading.

(One Hour.)

I.a and b.—Six Hours a Week Each.

Reading: Selections from Plato; Thucydides, omitting the harder speeches; Demosthenes, "Olynthiacs" and "Philippics." Previous preparation in class. Homer's "Iliad" and Sophocles. Sophocles is for some time to be prepared with the pupils. Learning by heart of suitable passages from the poets, as before. In addition, supplementary private reading.

Revision in every department of grammar, each according to need, but only occasionally. Translations from Greek every four weeks; these are, as a rule, to be taken in class from the author being read, or sometimes from dictation.

c. Notes on Method.

1. Grammar, Vocabulary, and Written Exercises.—The selection in all these is to be determined entirely by the aim of the instruction.

For the similarity as far as possible of the Greek and Latin Grammars, see Latin.

Everything which has already been done in the Latin grammar, and which does not serve the aim of the reading, is to be omitted from the grammatical instruction, and in particular almost all general definitions are left out. As regards the accidence and syntax, which are to be first acquired inductively from the reading book and then securely committed to memory, the same rule holds good as in Latin, only with this difference, that scarcely any heed is now paid to translating into Greek. The written exercises to that end in IIIb—IIb are of the most elementary description, and only serve as practice in the accidence and in the most important laws of syntax. In the higher stage they drop out entirely.

2. Reading.—This must, without detriment to thoroughness, be more comprehensive than hitherto, especially in the higher stage. The "Iliad" and "Odyssey," for instance, are as nearly as possible to be read through. So far as this is impossible in the original text, good translations are to be used by the teacher to supplement them. In the treatment of the plays of Sophocles, first of all the substance is to be given to the pupil by means of a preliminary translation and explanation of details, and then an insight into the artistic form. The same thing must be done, too, with Plato's Dialogues, the selection of which is to be made, first and foremost, with a view to what is ethically valuable from an educational standpoint.

In other respects the same points of view hold good for the treatment of Greek authors as for the treatment of Latin authors.

5.—FRENCH.

A. GYMNASIUM.

A. General Aim.

To enable the pupil to understand important works—not too difficult—of the last three centuries, and to give some degree of facility in the practical oral and written use of the language.

B. Programme of Work.

IV.—Four Hours a Week.

Acquirement of a correct pronunciation through practical exercises, chiefly in a short preparatory course, from which theoretical rules for the formation of sounds and pronunciation are excluded. Practice in reading, first attempts at conversation in every lesson. Acquirement of a moderate vocabulary. Learning by heart of the regular conjugations—restricted in the first instance to the indicative—and of the auxiliary verbs *avoir* and *être*. Article, partitive article in the nominative and accusative, plural of substantives, with the most important irregular plurals, feminines of adjectives, regular and irregular comparison; cardinal numbers.

Written and oral translations from the "First Book" (Elementarbuch) and the reading book; exercises in orthography.

IIIb.—Three Hours a Week.

Continuation of exercises in conversation and reading, extension of the vocabulary (*vide* IV.).

Revision of the regular conjugations and of the auxiliary verbs *avoir* and *être*, with special attention to the subjunctive. Orthographical changes of certain verbs in *er*, and, in addition, the most essential irregular verbs. The latter must be thoroughly learnt by heart, and the observation of pupils directed to the irregularities that certain verbs have in common.

Written and oral translations from the "First Book," and the reading book. Exercises in orthography.

IIIa.—Three Hours a Week.

The irregular verbs logically grouped, leaving out the less important ones and the rarer compound verbs. Completion of the rest of the accidence. General rules of syntax relating to the use of the auxiliary verbs *avoir* and *être*, position of words, tenses, indicative and subjunctive taught inductively in connection with model sentences. New words and phrases to be learnt.

Written and oral translations into French, dictations, practice in reproduction.

Reading of easy historical or narrative prose, and some poems.

Practice in correct reading and intonation and in speaking (question and answer) in connection with what has been read and with the events of everyday life in each lesson.

IIB.—Three Hours a Week.

Consolidation of the knowledge of the subjunctive; article, adjectives, adverbs, government of cases, prepositions, participles and the infinitive treated as in IIIA. Revision of the pronouns as far as they have been learnt in the lower stage. New words and phrases.

Written and oral translations into French, dictations, close reproduction of what has been read or heard, reading and practice in speaking, as in IIIA.

From IV to IIB each lesson is not generally appropriated to a particular branch of the instruction. The reading and the practice in speaking which goes with it form the central point of the whole instruction.

IIA—IA.—Two Hours a Week Each.

Reading: Selections—preferably modern—of French prose, partly with a view to investing the historical instruction with living interest; some suitable modern poetry, also one or two classical dramas, and, in any case, one of Molière's great comedies.

Importance is especially to be attached to the substance and to good translation. Synonyms, style, metre, as far as is necessary, and restricted in moderation to what is incontrovertible and generally accepted, in connection with what is read.

Occasional comprehensive recapitulation of the grammar, together with oral translation into French. In addition, every fortnight a translation from French.

Continued practice in speaking in every lesson, mainly confined to question and answer, as in IIIA.

B. REALGYMNASIUM.

A. General Aim.

To enable pupils to understand the more important works of the last three centuries and to give practice in the practical oral and written use of the language.

B. Programme of Work.

Preliminary Remark: The same programmes hold good in the main as for A. The difference is determined by the greater number of lessons and the importance of the subject in the curriculum of the school. Exercises in pronunciation and conversation, grammar, written exercises, vocabulary, and reading are wider in scope and are treated more thoroughly.

IV.—Five Hours a Week.

As in the Gymnasium.

IIIB.—Five Hours a Week.

Grammar as in the Gymnasium. In addition, the more important rules on the variation of the past participle, thorough practice in the pronouns, adverbs, the prepositions *de* and *à*.

In other respects as in the Gymnasium.

IIIA.—Five Hours a Week.

The irregular verbs as in IIIA in the Gymnasium. Comprehensive recapitulation in groups of the whole accidence. General rules for the use of the auxiliary verbs *avoir* and *être*, and the impersonal verbs. Tenses and moods, partly by the inductive and partly by the deductive method. Learning of new words and phrases.

Written and oral translations, dictations, reading, and practice in speaking as in the Gymnasium, only treated more fully and thoroughly.

IIB.—Four Hours a Week.

The general rules for the syntax of the article, adjective, adverb, pronoun, government of cases, infinitive, prepositions, and conjunctions. New words and phrases to be learnt.

In other respects as in IIIA.

IIA—IA.—Four Hours a Week Each.

The reading, which here, as in the Gymnasium, forms the central point of the instruction, is more extensive and thorough, so that a richer view of the development and the character of French literature in the last centuries is obtained. Metrical reading and exercises in the declamation of French verse.

Extension and revision of the more important portions of the grammar, partly methodical and partly as need occurs. New grouping and more thorough study of grammatical phenomena, with the addition of the more idiomatical expressions. In the study of style, synonyms and metres, only what is most essential for reading and with a view to the exercises in writing is to be given, and that inductively. New words, including some technical and scientific terms.

Written and oral translations into French, dictation, introduction to essay writing, advancing gradually from frequent short reproductions of what has been read to a freer treatment of concrete themes confined to a narrow range. Practice in speaking in every lesson in connection with what has been read, as well as in the occurrences of everyday life.

C. OBERREALSCHULE.

A. General Aim.

As in the Realgymnasium; but to that must also be added, as a linguistic training.

B. Programme of Work.

Preliminary Remark: In non-Latin schools French has the same duty to perform in respect to linguistic training as Latin has in schools where Latin is taught, and therefore much more time is devoted to the study of French. Consequently, differences of detail arise in the treatment of it, in spite of the general rules, which are substantially alike for all Modern Schools (Realanstalten). In the non-Latin schools the system of the grammar must be taught as such, and, moreover, the details are to be left less to chance. The pupils are to be more thoroughly grounded in the theory of the grammar, and the practical side is to be cultivated more extensively. The same thing holds good for the subsidiary means of mental discipline, such as style, metre, synonyms.

Reading, practice in speaking, written and oral translations, dictations and essays in the main as in the Realgymnasium, only more thorough.

After what has been said above, it is sufficient here merely to indicate the differences in the programme of grammar.

VI.—Six Hours a Week.

The chief point of the instruction is the learning of the regular conjugations and of the auxiliary verbs *avoir* and *être*. The most necessary part of the accidence of the substantive, the adjective and the numerals, in connection with the reading.

V.—Six Hours a Week.

Systematic study of the grammar. The article, the partitive article in the nominative and accusative, the most necessary rules for the gender of substantives, formation of plurals, formation of the feminine of adjectives, comparison of adjectives, the pronouns with regard to the most necessary rules of syntax, the numerals more accurately. Revision and thorough mastery of the regular conjugations and of the auxiliary verbs *avoir* and *être*, and the most important irregular verbs.

IV.—Six Hours a Week.

Revision of the programme of V., especially the pronouns. Formation and comparison of adverbs, irregular verbs in logical grouping. Summary of the conjunctions arranged according to their importance for different kinds of sentences. Prepositions *de* and *à*.

Survey of the whole accidence.

IIIB.—Six Hours a Week.

Use of the auxiliary verbs *avoir* and *être*. The impersonal verbs. Syntax of the verb: Use of the tenses, indicative, subjunctive, infinitive, participles, concord, and government of verbs.

IIIA.—Six Hours a Week.

Order of words. Syntax of the article, adjective, pronoun (excepting the demonstrative and indefinite pronouns).

IIB.—Five Hours a Week.

Syntax of the demonstrative and indefinite pronouns, syntax of the adverb, discussion of the more important prepositions, according to their different meanings. Revision of the complete accidence and syntax.

IIA—IA.—Four Hours a Week Each.

As in the Realgymnasium.

Special stress is to be laid upon the learning of new technical and commercial words.

D. REALSCHULE.

VI.—IV.

The same programmes as in the Oberrealschule.

III.—Six Hours a Week.

Use of the auxiliary verbs *avoir* and *être*. Syntax of the verb: Use of the tenses, indicative, subjunctive, infinitive, participle.

II.—Six Hours a Week.

The most necessary rules for the order of words. Syntax of the article and of the adjective.

I.—Five Hours a Week.

Syntax of the adverb and of the pronouns, chiefly revision. The less important indefinite pronouns are passed over. Revision of the whole of the grammar, with special attention to the prepositions. Occasional explanation of phenomena that have not yet been discussed, as they occur in reading.

6.—ENGLISH.

A. GYMNASIUM.

A. General Aim.

Correct pronunciation and elementary practice in the oral and written use of the language, founded upon a sure knowledge of the accidence, the most necessary rules of syntax, and an adequate vocabulary. Power to understand easier writers.

B. Programme of Work.

IIA—IA.—Two Hours a Week Each.

There is no need for a special division of the matter to be taught. It must be borne in mind that the study is essentially empirical, and the aim must be, by means of careful practical exercise in pronunciation in connection with what is read, to lay such a foundation as can be further built upon with success. Exercises in reading, writing, and speaking, as well as the vocabulary to be acquired, are solely to this end. The most necessary grammatical rules are to be treated inductively, and to be committed to memory from a short manual; everything else is to be explained in the reading. At first, a reader is to be used; in the last year a suitable author is to be read.

B. REALGYMNASIUM.

A. General Aim.

Power to understand the most important writings since Shakespeare, and practice in the practical oral and written use of the language.

B. Programme of Work.

IIIB.—Three Hours a Week.

Attainment of a correct pronunciation through practical exercises, at first in a short preparatory course, from which theoretical rules on the formation of sounds and pronunciation are excluded. Reading exercises and first attempts at speaking in every lesson. Acquirement of a limited vocabulary.

Study of the regular and irregular accidence, and attention to the syntax, so far as it assists the explanation of the accidence and the understanding of the reading. Written and oral translations from the "First Book" (Elementarbuch) and reading book. Exercises in spelling.

IIIA.—Three Hours a Week.

Continuation of the exercises in reading and speaking in every lesson. New words to be learnt.

Syntax of the verb, especially of the infinitive, gerund, participles, and the auxiliary verbs. Use of the tenses and subjunctive.

Written and oral translations into English and from English, and exercises, as in IIIB.

IIB.—Three Hours a Week.

Syntax of the article, substantive, adjective, pronoun, adverb. Summary of the more important prepositions. Partial revision of the same.

Written and oral exercises, close reproduction of what has been read, new words and phrases. Reading of easier narrative and descriptive prose and of a selection of poems.

Practice in speaking in every lesson in connection with what has been read and the occurrences of daily life.

IIA—IA.—Three Hours a Week Each.

The reading is the central point of the whole instruction.

Reading: Selections—preferably modern—of English prose, partly with a view to investing the historical instruction with living interest; suitable poetical works, especially Shakespeare's plays, from an authorised selection to be determined upon. Special attention is to be paid to the substance and to good translation, and the endeavour must be to give the pupil an idea of the characteristics of English literature and its development since Shakespeare in its main features. Points of style, synonyms, and metre, according to need, and restricted in moderation to what is generally valid and universally accepted in connection with the reading.

Wider and deeper study, as occasion arises, of the former grammar programme; some etymology and philology.

Written and oral translations into English, free reproduction of what has been read, hints on essay-writing based upon concrete themes, especially in schools in which special weight is given to English in preference to French. Elements of technical and scientific terminology. Continued practice in speaking in connection with the reading and daily occurrences.

C. OBERREALSCHULE.

A. General Aim.

As in the Realgymnasium.

B. Programme of Work.

Preliminary Remarks.—In the main the same programme as in the Realgymnasium. A somewhat more liberal allowance of time is made, with a view to giving opportunities for a stricter grammatical training, wider reading, and more extended practice in writing—which last must be more imitative than in the Realgymnasium, and can, moreover, include compositions on concrete technical subjects, letters, etc. Stress is especially to be laid on idiomatical expressions, and the acquirement of a richer stock of words, embracing technical terms, is to be ensured. Ampler practice in speaking. The grammar is apportioned as follows:—

IIIB.—Five Hours a Week.

Regular and irregular accidence to be gone through, as in the Realgymnasium.

IIIA.—Four Hours a Week.

Syntax of the verb, especially of the auxiliary verbs, and of the infini-

tive, gerund, participles; use of the tenses and subjunctive. Syntax of the article.

IIB.—Four Hours a Week.

Syntax of the substantive, adjective, pronouns, adverbs.

Revision and amplification of the rules learnt in IIIB. Explanation of the more important prepositions.

IIA—IA.—Four Hours a Week Each.

In the three higher classes, revision, more extended and detailed, whenever the reading or the written and oral exercises render it necessary.

D. REALSCHULE.

III.—Five Hours a Week.

Study of the regular and irregular accidence, and attention to the more important rules of syntax, which are necessary to the understanding of the accidence itself or the reading. Systematic grouping of kindred forms, with the help of the manual.

II.—Four Hours a Week.

The syntax of the verb: Auxiliary verbs, infinitive, gerund, participles, use of the tenses.

Only what is absolutely necessary from the syntax of the subjunctive.

I.—Four Hours a Week.

Explanation of the syntax of the article, substantive, adjective, pronoun, adverb; particularly, revision of the rules which have already been learnt in III., further amplified by reading.

Explanation of the more important prepositions, *about, after, at, by, from, to, with.*

C. Notes on Method for French and English.

1. Grammar, Vocabulary, and Written Exercises.—The problem of providing a linguistic training, which, in schools where Latin is taught, falls pre-eminently upon Latin grammar and the exercises connected with it, is solved in non-Latin schools by French grammar and the corresponding exercises. The study of French grammar in the latter must, therefore, be more systematic.

In the selection of French and English grammar books care must be taken to see that they do not differ too much in their general structure and that their terminology is the same as in the other languages.

Grammars written in French or English are to be rejected, even in the higher stages. The grammar is to be taught in German.

The grammatical rules are to be restricted to what is regular and in common usage, and a distinction is to be made between fundamental laws, secondary rules, and rare constructions. General definitions are to be altogether avoided in schools where Latin is taught, and in non-Latin schools they are to be restricted to what is absolutely necessary.

The arrangement of the syntax according to parts of speech is to be preferred; at the same time a practical arrangement into groups of kindred forms is to be recommended.

The results of historical philology are to be referred to cautiously, and

only when the understanding of accidence, rules, or the formation of words, in connection with what has been learnt, is rendered easier by means of them. In non-Latin schools such reference is to be avoided.

The first aim in the elementary stage of French and English is to guide the pupil to a correct pronunciation without having recourse to general rules of pronunciation or theoretical rules of phonetics and phonetic transcription. The end will best be served if this early guidance takes the form of a short course of practice in sounds. The means to the attainment of a correct pronunciation at school are: pronunciation of a word or sentence by the teacher, repetition of it after him by the pupils, speaking in chorus, and reading in chorus. The training of the faculties of hearing and speaking is always to be kept in view.

This preliminary course is to be at once followed by the first attempts at speaking. Materials for the latter are supplied by the "Elementarbuch" and reading book, in which the sentences are systematically arranged in such a way that they can be easily varied. This also lays the preparatory foundation for grammar, reading, oral and written exercises.

It is indispensable that the accidence and the more important rules of syntax should be learnt by heart. But they must first be explained inductively, by means of examples and model sentences.

Great importance is to be attached in all stages to the acquirement in both languages of a stock of words and phrases, increasing in extent at each stage, and chosen in reference to their use in daily intercourse. Complete mastery of these words and phrases is to be secured by continual oral and written repetition. Special vocabularies, arranged for the reading and the needs of daily life, may be used to good purpose.

Exercises in spelling are to be given regularly, from the lowest class upwards, and are to be continued up to the highest classes in the form of dictation as a means of accustoming the ear to the sounds. The rest of the written exercises are intended to afford practice in grammar, reading, and vocabulary, by frequent repetition of the material provided by the "First Book" and reading book. Practice in *re*translation also is especially recommended in the higher classes. These *re*translations are the stepping-stone to original compositions, letters, summaries, and shorter historical descriptions in the foreign language.

For translations from foreign languages the same remarks hold good as in Latin.

2. Reading.—In both languages, and in all stages, prose reading is to be preferred to poetical, and historical and descriptive to other kinds: but the reading of prose alongside of poetry is, as far as possible, to be avoided. In the higher classes, especially in Modern Schools (Realanstalten), attention is to be paid to the other branches of literature. Here the endeavour must be to give a knowledge of the life, manners, and customs and the most important intellectual aims of both nations, and to this end modern literature especially must be kept in view.

What has been said about turning historical readings in the dead languages to account for teaching history holds good here also.

3. Practice in the Oral Use of Both Languages.—This is to begin in the lowest stage soon after the first attempts at pronunciation, and is to accompany the whole course of instruction from stage to stage. This practice has to be chiefly given by means of question and answer; the material will either be drawn from the reading or from the occurrences of daily life. Oral summaries are not to be rejected, but, as monologues on the part of the pupils, they are less likely to conduce to pleasure in speaking and readiness in the practical use of the language. Except the

lessons set apart for written translations, no lesson shall go by without short practice in conversation. Worked in this way the latter will materially assist the rest of the instruction, and as a preparatory groundwork for the ready facility in the oral use of both languages, which can only be attained by intercourse with Frenchmen and Englishmen, it will fulfil its purpose.

7.—HISTORY.

Preliminary Remarks.—The aim, programme of work, and notes on method are the same for the corresponding stages of all kinds of higher schools.

A. General Aim.

Knowledge of the epoch-making events of universal history, especially of German and Prussian history, together with their causes and effects. Development of the historical instinct.

B. Programme of Work.

VI.—One Hour a Week.

Portraits from the national history, at first drawn from the present time and the province in which the school is situated.

V.—One Hour a Week.

Stories from the mythical early history of the Greeks and Romans.

The legends belonging to classical antiquity come into the reading of the dead languages and the instruction in German.

IV.—Two Hours a Week.

Survey of Greek history to the death of Alexander the Great (with a glance at the history of the Successors), and Roman history to the death of Augustus, mainly in connection with leading characters. The treatment of the time before Solon, on the one side, and before the appearance of Pyrrhus, on the other, is to be reduced to the briefest proportions.

The most indispensable information about the chief civilised nations of the East is to be interwoven into the Greek history, so far as they have not already been treated in Biblical history.

The essential dates and places of historical events are to be committed to memory in all stages, the former with the limitations given in the directions issued on July 22nd, 1891—U. H. 2,394.

IIIb.—Two Hours a Week.

Short sketch of the history of the Western Roman Empire from the death of Augustus; then German history to the close of the middle ages. Only so much of foreign history is to be dealt with as is of universal importance.

IIIa.—Two Hours a Week.

German history from the close of the middle ages to the accession of Frederick the Great, especially the history of Brandenburg and Prussia.

Foreign history is to be introduced so far as it is necessary for the understanding of the history of Germany, and of Brandenburg and Prussia.

IIb.—Two Hours a Week.

German and Prussian history from the accession of Frederick the Great to the present time.

Foreign history as in IIIa.

Frederick the Great, the French Revolution, Napoleon I.—especially in his relations to Germany—the fall and rise of Prussia, the wars of liberation, the domestic reorganisation of Prussia, the reconstitution of political relations in Germany in 1815, the efforts for the establishment of the Zollverein and of a greater national unity, the acts of the Emperor William I., and the foundation of the German Empire compose the chief material of the programme for IIb.

In connection with the national history and the lives of the respective rulers a comparative survey should be made of our social and economical development up to 1888, emphasising the services of the Hohenzollerns, especially with regard to the improvement of the peasant, middle, and working classes.

IIa.—Two Hours a Week.

Chief events of Greek history to the death of Alexander the Great, and of Roman history to the fall of the Western Empire, from the point of view of its causes and effects. Special attention is to be paid to questions of constitution and civilisation, arranged in groups for purposes of comparison.

Ib.—Three Hours a Week.

Epoch-making events of universal history from the fall of the Western Empire to the end of the Thirty Years' War, in connection with their causes and effects. In other respects as in IIa.

Foreign affairs of universal importance, the Crusades, Church reform movements, and the discoveries of the fourteenth and fifteenth centuries are to be treated from more general points of view than in III.

Historical-geographical sketch of the States existing in 1848.

Ia.—Three Hours a Week.

The most important events of modern times, from the end of the Thirty Years' War (especially in the history of Brandenburg and Prussia) down to the present day, in connection with their causes and effects. In other respects as in IIa.

In connection with the lives of the great Elector, Frederick William I., Frederick the Great, Frederick William III., and the Emperor William I., comprehensive instruction as in IIb, suited to the intelligence of the higher stage.

c. Notes on Method.

The function of the elementary instruction in VI. and V. is to bring near to a boy's heart and imagination the great heroes of the near and distant past, beginning with the present time and the province in which the school is situated, and thereby to enrich his ideas, and to lay the first concrete foundation for a power of historical observation. The enthusiasm of the teacher himself, and simple, but life-like, representations of the heroes introduced in stories told without the aid of a book, do almost all that is necessary.

For the success of this instruction it is of importance that the German

reading book used in these stages should stand in the closest relation to the biographical work.

In the next classes the chief object is to make a distinction between the instruction in IV—IIb and that in the higher stage. In the former the most important facts (frequently in connection with famous personages) and dates should be learnt and committed to memory. Then the higher stage can be devoted to a deeper and wider study and comparison from different points of view of principles involved in what has already been learnt in IV—IIb. Matters of fact must, of course, be introduced and committed to memory in this stage too; but principles must be brought into the foreground, rather than facts; and, above all, an understanding of the relations of cause and effect and of the great general laws that govern history, as well as ability to understand the present from the past, must be awakened in the pupils.

In both stages success depends, first and foremost, upon the personality of the teacher, which can only have full play when he is lecturing without books. In order to invest historical instruction with living interest, the employment of characteristic objects in illustration is recommended.

The instruction in economic and social questions in their relation to the present time prescribed for IIb and Ia demands peculiarly reliable tact and great circumspection in the choice and treatment of the matter to be dealt with. The great aim is to enable the healthy mind of the younger generations of Germans to form a fair judgment of the portentousness of certain social longings and strivings of the present day. This aim will best be furthered by carefully avoiding any obtrusion of one-sided views; on the contrary, an ethical and historical spirit should pervade every branch of instruction. In the presence of the social requirements of the present time, attention should be drawn dispassionately to the *historical* development of the mutual relations of the different classes of society, and to the position of the working class especially, so as to demonstrate the continuous progress that has been made for the better, and the mischievous effects of any violent attempt to alter social arrangements.

In the course of historical instruction the social reforms effected by the civilised states of Europe during the last two centuries are brought under the observation of the pupils, and the transition from this to a representation of the services rendered in this sphere by our ruling House down to the most recent times is a natural one.

It is self-evident that in IIb this instruction should be concise enough to correspond to the grade of the class, and that it should deal mainly with facts, while in Ia it should be of a wider character and deal more with principles, causes, and effects.

Comparative summaries of historical facts, classifying the material into groups from different points of view, have often been tried with the greatest success, and are strongly recommended. This especially holds good for revision in the higher classes. Full particulars of the manner in which these classifying revisions are to be carried out are given in the literature on the subject.

Special opportunities for the delivery of short lectures by the pupils must be given in the history classes.

8.—GEOGRAPHY.

Preliminary remarks.—Substantially the same as for 7 (History).

A. General Aim.

Intelligent observation of the physical aspect of the neighbourhood and of maps; a knowledge of the physical formation of the earth's surface and its political divisions, as well as the rudiments of mathematical geography.

B. Programme of Work.

VI.—Two Hours a Week.

Fundamental notions of physical and mathematical geography in elementary form, and founded upon the local surroundings. Explanation of relief, the globe and the map. General survey of the mountain and water systems of the earth's surface, and a picture of the home surroundings in particular, from the same points of view, without a book, and, as far as possible, in connection with physiography as in V.

V.—Two Hours a Week.

Physical and political geography of Germany with the aid of a manual. Further instruction in the understanding of relief, the globe and the map. The beginnings of drawing simple outline maps on the blackboard.

IV.—Two Hours a Week.

Physical and political geography of Europe outside Germany, especially the Mediterranean countries. The drawing of simple outline maps on the blackboard and in exercise books.

IIIb.—One to Two Hours a Week.

Revision of the political geography of Germany, physical and political geography of the parts of the world outside Europe, exclusive of the German colonies. Outline maps as in IV.

IIIa.—One to Two Hours a Week.

Revision of the physical geography of Germany. Geography of the German colonies. Outline maps as in IV.

IIb.—One to Two Hours a Week.

Revision of the geography of Europe. Elementary mathematical Geography. Outline maps as in IV.

In Modern Schools also the best known means of intercourse and trade routes of the present day.

IIa—I.

The most important general geography and the principles of mathematical geography, both in connection with mathematics and physics.

Other revision in the history classes according to need.

In Modern Schools also more detailed comparative survey of the most important means of intercourse and trade routes down to the present time.

c. Notes on Method.

It is in keeping with the purpose of this instruction in higher schools that, without detriment to the importance of geography as a branch of natural science, the practical use of the subject to the pupils should be kept in view, and that political geography should not be kept in the background.

The aim of the instruction and the programme of work are to be determined by that principle. The amount to be learnt by heart is to be restricted and to serve as a guidance to intelligent observation of surrounding Nature, of relief and of the map.

As an aid to the acquirement of the first notions of physical and mathematical geography the instruction is to be linked with the observation of the immediate neighbourhood, and by that means the general ideas are to be brought as far as possible within the pupils' comprehension. But all subtleties are to be avoided, and so-called systematic observations are to be warned against.

When the first fundamental notions are in this way understood they are to be shown to the pupil on the relief and the globe, but then he is to be guided to the use of the map, which he must gradually learn to read.

The drawing which is recommended in the programme is very important for this subject, but a warning must be given against making excessive demands upon pupils. The teacher will generally have to be satisfied with simple outlines, skeleton maps, and the like, on the blackboard.

In the higher stage, drawing is especially recommended for the revisions which are to take place at the end of each quarter of a year in consecutive lessons.

Whether instruction in geography will be better given by the history master or by the natural science master depends upon the teacher himself and his qualifications. Generally speaking, the natural science master seems to be more fitted in the lower stage and the history master in the intermediate stage. Revisions in the higher stage, so far as they concern physical and political geography, must be held by the history master, while those of general, and especially of mathematical, geography will be held by the teacher of mathematics or physics.

9.—MATHEMATICS.

A. GYMNASIUM.

a. General Aim.

Accuracy in arithmetical calculations and in their application to the ordinary circumstances of everyday life. Algebra, including the binomial theorem for positive integral exponents and the solution of quadratic equations. Plane and solid geometry, and plane trigonometry. The theory of co-ordinates and the simpler principles of conic sections, In all these subjects it is not enough that the pupils should know and understand the bookwork, but they must attain skill and readiness in the application of it for working out examples.

b. Programme of Work.

VI.—Four Hours a Week.

Revision of the first four rules with whole numbers, abstract and concrete. German weights, measures, and money, with practice in weights, measures, and money (as in VI.).

V.—Four Hours a Week.

Divisibility of numbers (factors). Vulgar fractions. Simple problems in rule of three (to be solved by the unitary method). German weights, measures, and money (as in VI.).

IV.—Four Hours a Week.

Arithmetic (two hours): Decimals. Simple and double rule of three, with whole numbers and fractions (problems drawn from daily life).

Plane Geometry (two hours): Properties of straight lines, angles, and triangles (*i.e.*, Euclid I., 1—26 about).

IIIb.—Three Hours a Week.

Arithmetic and Algebra (one hour): The first four rules with algebraical symbols, restricted to what is essential. (In the examples simple equations with one unknown quantity are also to be used.)

Plane Geometry (two hours): Parallelograms (*i.e.*, Euclid I., 27—41). Properties of circles, first part (*i.e.*, Euclid III., 1—30).

IIIa.—Three Hours a Week.

Algebra (summer, one hour; winter, two hours): Simple and simultaneous equations of the first degree (together with practice in fractions). Indices with positive integral exponents. Extraction of roots as far as necessary.

Plane Geometry (summer, two hours; winter, one hour): Properties of circles, second part (*i.e.*, Euclid III., 30—36 and IV.). Propositions on the equality of area of figures; measurement of the surfaces of rectilineal figures (*i.e.*, Euclid I., 35—48). Theory of similar triangles (*i.e.*, Euclid VI., 1—19).

IIb.—Four Hours a Week.

Equations, including simple quadratics with one unknown. Definitions of negative and fractional indices. Theory of logarithms. Exercises in calculating with logarithms (to five places).

Calculation of the area and circumference of a circle. Definitions of the trigonometrical functions. Trigonometrical solution of right-angled and isosceles triangles.

Simple solid bodies and calculation of their dimensions (lineal and superficial) and contents.

IIa.—Four Hours a Week.

Indices, surds and logarithms. Equations, including quadratics with several unknowns. Arithmetical and geometrical progression. Conclusion of the theory of similitude (extreme and mean ratio, elements of harmonic ranges and pencils). Plane trigonometry, with practice in the solution of triangles, quadrilaterals, and regular figures.

Ib.—Four Hours a Week.

Revision of the arithmetical and algebraical work of previous classes by exercises in problems. Compound interest and stocks.

Imaginary quantities.

Conclusion of trigonometry (addition theorem).

Solid geometry, with mathematical geography of the surface of the globe.

Ia.—Four Hours a Week.

Binomial theorem for positive integral exponents.

Conclusion of solid geometry.

The theory of co-ordinates and some principles of conic sections.

c. Notes on Method.

The aim in the teaching of arithmetic is accuracy and rapidity in operations with figures. In order that it may be of a piece with the subsequent instruction in algebra, and serve as a useful preparation for the latter, both the revision of the first four rules in VI. and the treatment of fractions in V. and IV. must be carried out in mathematical form, so that continual practice may be given in the use of brackets. The knowledge of German money, weights, and measures is to be given by means of objects. Even in the introduction to the theory of fractions the aim in all explanations should be that the pupils may learn to reckon with fractions as with concrete things. In all stages the written exercises with larger numbers and the problems are preceded by exercises in mental arithmetic with small numbers, in order to make the rule understood. Practice in contracted multiplication and division is to be given in the middle stage. In the treatment of so-called commercial arithmetic, all examples based upon circumstances and technicalities of purely commercial intercourse, which are unintelligible to the pupils, are to be excluded. Arithmetic proper ceases in IV. Accuracy in reckoning, however, is to be kept up by continued practice in the algebraical instruction of the subsequent classes.

Geometry is to be begun while arithmetic is still being learnt in IV.; algebra is to be begun in IIIb.

The change in the distribution of mathematics has been made with

the object of giving the pupils who are leaving school after having passed through IIB. a preparatory training which shall be, to some extent at any rate, complete. In view of the retention of three hours in III., which has been conceded from various considerations, and of the scope of the programme for IIB, a systematic sifting of the matter to be taught, by the exclusion of everything that is not absolutely necessary, is expected of the masters that teach in these classes. In the same way in plane geometry, only the bookwork which is essential for the system is to be committed to memory; everything else is to be treated in the form of examples. In trigonometry, which is to be treated as far as possible by means of figures, *i.e.*, geometrically, only such formulæ are to be practised as relate to the functions of *one* angle, and are absolutely requisite for the solution of triangles. In solid geometry, in which stress is to be laid upon the measurement of bodies, the instruction is to begin with the consideration of simple bodies, such as cubes and prisms, and the treatment of the most important problems on the position of lines and planes in space shall not be proceeded with until the pupils' conception of space has been sufficiently exercised. For the rest it is permissible, where the circumstances allow, to deal with certain portions of the programme for IIB in IIIA in order to lighten the work of the former as much as possible.

Strict adherence to the course of studies prescribed for the year is indispensable. As it is more difficult in mathematics than in any other branch of studies to make up by private industry for gaps left in the elementary knowledge (theoretical and practical), and as it has been proved by experience that the difficulty which sometimes attaches to this instruction in the higher classes arises almost without exception from gaps left in the elementary stages, conscientious strictness in the matter of promotion becomes a more urgent duty towards pupils.

The elimination of certain portions formerly taught in IIA and I is intended to give opportunity for a more thorough study of what is left, and for the working out of more numerous examples. But then the possibility is also offered of introducing the pupils of the highest class to the especially important theory of co-ordinates, and of giving them, by the simplest possible explanation, a clear idea of some of the fundamental properties of conic sections. It is self-evident that systematic instruction cannot be given either in analytical or in modern geometry. A few fundamental formulæ of spherical trigonometry, which are requisite for a better understanding of mathematical geography, can be deduced in a simple manner from observations of the solid angle contained by three planes.

B. REALGYMNASIUM AND OBERREALSCHULE.

A. General Aim.

Accuracy and skill in arithmetical calculations and in their application to the ordinary circumstances of everyday life. Algebra, including the proof of the binomial theorem for any exponent, and equations of the third degree. Plane geometry, including harmonic ranges and pencils, chords, centres and axes of similitude. Solid geometry, with the elements of descriptive geometry. Plane and spherical trigonometry. Introduction to the theory of maxima and minima. Analytical geometry of two dimensions. In addition the

treatment of the most important examples of summation of series is obligatory for the Oberrealschulen. In these schools it is left to the discretion of the teacher to deal or not, as he likes, with equations of the fourth degree and to explain and give practice in the methods for the approximate solution of numerical, algebraical and transcendental equations (Horner's method and graphical solution). In all these branches not only is accurate knowledge in the text to be acquired, but also readiness in its application.

B. Programme of Work.

VI.—Four to Five Hours a Week.

As in the Gymnasium.

V.—Four to Five Hours a Week.

As in the Gymnasium.

IV.—Four to Six Hours a Week.

Arithmetic: Decimals. Simple and double rule of three with whole numbers and fractions (examples from everyday life). Beginning of calculations with algebraical symbols.

Plane Geometry: Straight lines, angles, triangles, and parallelograms; introduction to the calculation of areas (*i.e.*, Euclid I., 1—42).

IIIb.—Five to Six Hours a Week.

Algebra: The first four rules with algebraical symbols. Simple equations. Application of the same to examples drawn from everyday life, and in particular to so-called commercial arithmetic.

Plane Geometry: Properties of circles (*i.e.*, Euclid III. and IV.). Propositions on the equality of area of figures; measurement of the surface of rectilineal figures (*i.e.*, Euclid I. 35-48).

IIIa.—Five Hours a Week.

Algebra (two hours): Theory of indices and roots. Equations, including simple quadratics with one unknown.

Plane Geometry (three hours): Similitude of figures (*i.e.*, Euclid VI.). Measurement of regular polygons, as well as the area and circumference of circles.

IIb.—Five Hours a Week.

The essentials of the theory of application of logarithms, together with practice in logarithmic calculations. Quadratic equations.

Elements of trigonometry and solution of triangles.

The most necessary propositions in solid geometry, dealing with planes and straight lines. Simple solid bodies, and calculation of their dimensions (lineal and superficial) and contents.

IIa.—Five Hours a Week.

Harder quadratic equations. Arithmetical and geometrical progression. Compound interest and stocks.

Theory of harmonic ranges and pencils, chords, centres, and axes of similitude. Construction of algebraical expressions.

Measurement of angles (including the addition theorem), with harder examples in the solution of triangles.

Solid Geometry.

IIB.—Five Hours a Week.

Cubic equations. In addition, in Oberrealschulen, at the discretion of the teacher, equations of the fourth degree and methods for the approximate numerical solution of equations of any degree.

Elementary synthetical treatment of the most important propositions on conic sections.

Spherical trigonometry, together with its application to mathematical geography.

IIA.—Five Hours a Week.

Elementary theory of maxima and minima. Binomial theorem for any exponent. In addition, in Oberrealschulen, the most important examples of the summation of series. Whether this branch is to be treated in the Realgymnasium, or how far, is left to the discretion of the teacher of the subject.

Analytical geometry of two dimensions.

C. NOTES ON METHOD.

As regards the teaching of arithmetic, which in Modern Schools (Realanstalten) ceases as a rule in IIIB, see notes on the programme for the Gymnasium.

The range of the mathematical instruction is left in the main unaltered as far as the number of hours and the programme are concerned; only a fresh apportionment has been made of the matter to be learnt, with the object of securing to the pupils who are leaving after having passed through IIB a preparatory training which shall be as complete as possible. With regard to the form of the instruction in this class, the notes on the programme for the corresponding class in the Gymnasium apply. The increase of time allowed facilitates a more extensive practice in detail. The withdrawal of one hour a week from IIIA in the Oberrealschule will not prevent the completion of the programme if the time allowed is made good use of, and the matter to be learnt is restricted to what is most essential.

The extent to which studies can be carried in the individual branches of mathematics will differ somewhat in the higher classes according to the ages of the pupils; and in the Oberrealschule, in consequence of the more liberal allowance of time, it will be greater than in the Realgymnasium. In general, however, care is to be taken throughout to lay the greatest stress upon accuracy of knowledge and readiness in applying it. This point must be kept in view in determining the selection and amount of the subject matter. Thus, for instance, in spherical trigonometry it is not requisite that the formulæ given in most books should be worked out and practised, but it is sufficient if the pupils have correctly grasped the first propositions and are thereby enabled to solve simple problems in mathematical geography, even if it be by rather lengthy methods. Moreover, care is to be taken that even in the highest stage the instruction shall not be too much in the nature of calculation, but even there practice in geometrical observation and construction must be continued. In solid geometry it is important

that such preparation and assistance shall be given to the pupil as may enable him to understand descriptive geometry.

C. REALSCHULE.

General Aim.

Accuracy and readiness in calculations with finite numbers and in their application to the ordinary circumstances of everyday life. Algebra, including a knowledge of logarithms and easy quadratic equations. Fundamental laws of plane and solid geometry. Rudiments of plane trigonometry.

10.—NATURAL SCIENCES.

A. GYMNASIUM.

a. General Aim.

Botany.—Knowledge of the more important families of the natural system. Biology of plants. Consideration of the most important useful foreign plants. Something about the anatomy and physiology of plants and about cryptogams and the diseases of plants.

Zoology.—A knowledge of the most important species of animals in the different classes of vertebrates, as well as some examples from the other classes of the animal kingdom. Fundamental principles of the geographical distribution of animals. Knowledge of the anatomy of the human body, with instruction in hygiene.

Mineralogy (which is not to be treated as a special subject of instruction, but in connection with chemistry).—Knowledge of the simplest crystal formations and a few specially important minerals.

Physics.—Knowledge of the most important phenomena and laws in the different branches of physics and the fundamental principles of mathematical geography.

Chemistry.—Knowledge of the simplest laws.

b. Programme of Work.

VI.—Two Hours a Week.

Description of flowering plants actually before the pupils; in connection with this the forms and parts of the roots, stems, leaves, flowers, and easily recognisable kinds of inflorescence and fruits are to be explained.

Description of important mammals and birds in relation to form, colour, and size, from examples at hand and illustrations; information about their mode of life and their usefulness or harmfulness.

V.—Two Hours a Week.

Complete knowledge of the external organs of flowering plants, in connection with the description and comparison of related genera actually lying before the pupils.

Description of more important vertebrates from actual specimens and illustrations; together with information about their mode of life and their usefulness or harmfulness. Outline of the human skeleton.

Exercises in simple outline drawings of what has been observed, as in the succeeding classes.

IV.—Two Hours a Week.

Comparative description of related genera and species of flowering plants from actual specimens. Review of the "natural system" of plants. Biology of plants.

Lower animals, especially useful and harmful ones and their enemies, with special attention to insects.

IIIb.—Two Hours a Week.

Description of some harder genera of plants to supplement the knowledge of morphology, classification, and biology. Consideration of the most important foreign useful plants.

Something about the anatomy and physiology of plants, and about cryptogams and the diseases of plants.

(In the last quarter of the year.)—Review of the animal kingdom. Fundamental principles of the geographical distribution of animals.

IIIa.—Two Hours a Week.

Human physiology, with instruction in hygiene.

Elementary course of physics: Part I. (mechanical phenomena, the most important rudiments of heat).

IIb.—Two Hours a Week.

Elementary course of physics: Part II. (magnetism, electricity, the most important chemical phenomena and discussion of some specially important minerals, and the simplest crystal formations; acoustics; some simple sections of optics).

IIa.—Two Hours a Week.

Heat, magnetism, electricity, revision of the main principles of chemistry and mineralogy.

Ib.—Two Hours a Week.

Mechanics (omitting if necessary the theory of heat and the wave theory of light). Acoustics.

Ia.—Two Hours a Week.

Optics. Mathematical geography.

c. Notes on Method.

The instruction in zoology and botany, beginning with the observation and description of individual plants and animals, is intended to lead the pupils gradually, by comparison of related forms, to the acquirement of the most important notions of morphology and to a knowledge of the system. The pupils are in all stages to have practice in the simplest outline drawing of what they have observed. Special importance is to be attached not so much to the amount of what is learnt as to the thoroughness with which it is studied. The representatives of the animal and vegetable kingdom of our own country especially are to be dealt with, but alongside of them also some specially characteristic forms from foreign parts of the world.

If the summer half begins so early that it is impossible to procure suitable plants for the lessons on botany, it rests with the teacher to devote the first part of it to a supplementary revision of the zoological programme for the winter half.

The programme of instruction in physics and chemistry, together with mineralogy, has undergone considerable change. What chiefly led to this change was the desire to give those pupils who leave school after having passed through IIb the opportunity of carrying away with them as complete a conception as possible of the most important laws in these subjects. Thereby the arrangement of the matter into two courses was necessitated. In the first course, which covers the second

half-year of IIIA and IIB, the elements are to be treated, while in the second course, which is based upon the first, the knowledge there acquired is to be supplemented and developed.

In view of the enormous extent of ground to be covered in these subjects, and the comparatively small amount of time that can be given to them, the greatest care must be exercised in making an appropriate selection. The endeavour of the teacher must be above all to guide the pupils to think and observe for themselves, and to carefully avoid overburdening them with matter to be learnt by heart. Experiments are to play a foremost part in all observations. The question of a manual needs a special regulation.

B. REALGYMNASIUM AND OBERREALSCHULE.

A. General Aim.

Botany.—Knowledge of the natural system, more intimate acquaintance with the most important natural orders of indigenous plants. Biology of plants. Consideration of the most important foreign useful plants. Information about the geographical distribution of well-known plants. Something about the anatomy and physiology of plants, as well as cryptogams and the diseases of plants.

Zoology.—Knowledge of the system of vertebrates and invertebrates. Main principles of the geographical distribution of animals. Knowledge of human anatomy, together with instruction in hygiene.

Mineralogy.—Knowledge of the more important crystal formations, as well as of the physical properties and the chemical composition of the best-known minerals.

Physics.—Accurate knowledge of the most important phenomena and laws in the different branches of physics, as well as the mathematical deduction of the principal laws. Knowledge of the most important laws of mathematical geography.

Chemistry.—Knowledge of the chief elements and their most important inorganic compounds, as well as the fundamental laws of chemistry. In the Oberrealschule also knowledge of the chief organic compounds.

B. Programme of Work.

VI.—Two Hours a Week.

As in the Gymnasium.

V.—Two Hours a Week.

As in the Gymnasium.

IV.—Two Hours a Week.

Comparative description of related genera and species of flowering plants from actual specimens. Review of the "natural system" of plants. Biology of plants.

Revision and extension of the zoological work of former classes, with practice in referring mammals to their classes.

IIIb.—Two Hours a Week.

Revision and extension of the botanical work of former classes with practice in referring phanerogams to their classes according to the natural system.

Annulates.

IIIa.—Two Hours a Week.

Description of some of the more difficult kinds of plants, to serve as a revision and extension of the knowledge of morphology, natural classification, and biology. Discussion of the most important foreign cultivated plants. Something about the geographical distribution of plants.

Lower animals. Extension and revision of the zoological work of former classes, with practice in referring invertebrates to their classes. Revision of the classification of vertebrates.

In addition in the Oberrealschule (two hours a week).

Concise explanation of the subject matter and aims of physical science. Mechanical phenomena, including hydrostatics and aerostatics. Heat.

IIb.—Realgymnasium: Five Hours a Week.

Oberrealschule: Six Hours a Week.

Something about the anatomy and physiology of plants, as well as cryptogams and the diseases of plants.

Human anatomy and physiology, with instruction in hygiene.

Magnetism, electricity, acoustics, important optical phenomena.

Preparatory instruction in chemistry. Elements of crystallography.

IIa.—Realgymnasium: Five Hours a Week.

Oberrealschule: Six Hours a Week.

Heat (exclusive of radiation). Magnetism and electricity.

General notions of chemistry. Non-metallic elements. Arithmetical problems founded on the atomic theory.

Ib.—Realgymnasium: Five Hours a Week.

Oberrealschule: Six Hours a Week.

Mechanics (including the theory of heat and the wave theory of light). Acoustics.

Metals. Simple work in the laboratory.

Ia.—Realgymnasium: Five Hours a Week.

Oberrealschule: Six Hours a Week.

Optics. General revision.

Some important sections from organic chemistry. Simple work in the laboratory.

c. Notes on Method.

The endeavour of the teacher must always be to lead pupils to the observation and description of individual natural forms, and so

to carry them on through comparison of related forms to a comprehension of the system, and while thus introducing them to the systematic classification to make them acquainted with the most important phenomena and laws of animal and plant life. No special importance is to be attached to completeness. The material is to be drawn chiefly from the flora and fauna of the country, so far as the neighbourhood and the school museum offer them, but characteristic forms of other parts of the world must not remain unnoticed. In all stages the pupils are to be given practice in the simple outline drawing of what they have observed. As regards the allotment of time to botanical and zoological instruction in individual classes the same regulations hold good as for the Gymnasium.

In the Realgymnasium and Oberrealschule, just as in the Gymnasium, physics is divided into two courses. The first course ends with IIB, and the instruction is to be based in the simplest manner upon experiments. The question of the book to be used needs a special regulation.

In the Realgymnasium the fundamental laws of chemistry and mineralogy are also to be treated in this course, while in the second course, which begins with IIA, special hours are set apart for instruction in chemistry and mineralogy. In order to insure the not inconsiderable programme being carried out, it is advisable to entrust the whole natural science teaching in IIB to the same teacher, so as to render greater concentration possible. It is also permissible, under certain circumstances, to model the curriculum for natural science instruction in IIIA and IIB in these schools on that of the Gymnasium, provided that the programmes of the classes named do not thereby on the whole suffer any curtailment.

In the Oberrealschule the instruction in physics is separated from the very beginning from chemistry and mineralogy, and even in IIIA instruction in physics extends over the whole school-year.

Instruction in mineralogy goes most naturally with chemistry, and is as a rule to be limited to the classification of minerals. The most important crystal formations and the physical and chemical properties of the chief minerals are to be treated.

In the theoretical part of chemistry care is to be taken that the pupils are not, by uniform treatment of all the elements and their compounds, overburdened with subject matter and forced to learn an excessive amount by heart; but in the Oberrealschule especially the study must be accompanied by practical work in the laboratory, in which the pupils go through the most important reactions of metalloids and metals, make simple qualitative analyses, and make up easy preparations. Practical work of this kind has, under proper guidance, an educational value which is not to be under-estimated, and under certain circumstances it can be extended to physics also.

C. REALSCHULE.

Natural History.

Guidance to the observation and description of individual plants. Knowledge of the more important families of plants and phenomena in the life of the plants.

Guidance to the observation and description of representatives of the individual classes of the animal kingdom. Knowledge of the more

important divisions of vertebrates and insects. Acquaintance with the structure of the human body.

Knowledge of the simplest crystal formations, as well as of some specially important minerals.

Natural Philosophy.

Knowledge, acquired by experiments, of the commonest properties of bodies, the fundamental laws of statics, electricity, magnetism, heat, as well as the simplest laws of optics and acoustics, and of the most familiar chemical elements and their chief compounds.

11.—DRAWING.

A. GYMNASIUM.

a. General Aim of Instruction.

The aim of the compulsory instruction in drawing is to enable boys to see correctly, and accurately represent simple solid objects in outline.

In the optional instruction in the higher classes, from IIb upwards, the sense of form and colour is further developed by the reproduction in outline of objects difficult to represent, and attention is paid to light and shade. Certain pupils for whom geometrical drawing is of special importance will be introduced to descriptive geometry.

b. Remarks.

Compulsory instruction:—The pupils are taught in classes and divisions to draw plane rectilineal and curvilineal figures from large wall copies, explained by drawings on the blackboard by the teacher; at the same time the forms given are varied. Copy slips are not to be used. Instruction in outline drawing from simple models, plaster ornaments, and other suitable solid objects is given individually. In these exercises a certain finality is aimed at in the case of those pupils who are not going to continue the subject, while, on the other hand, a solid foundation is secured for each one who is anxious for further training in drawing.

Non-compulsory instruction:—Freehand outline drawing from implements, vessels, plaster ornaments, living plants, and other objects according to the ability of each pupil, followed by drawings with light and shade effects from models and plaster ornaments, and afterwards by the representation in pencil and water-colour of coloured objects, living plants, fruits, and the like.

A knowledge of form and colour and the cultivation of taste are to be developed by the necessary explanations.

In geometrical drawing, as far as it can be studied at all in the Gymnasium, compass-drawing affords the first practice in the use of instruments by the careful drawing of plane patterns, segments of a circle, and other geometrical figures. Then follows the geometrical representation of bodies from different aspects with sections and development of planes, and finally an introduction to descriptive geometry, sciography, and perspective.

B. REALGYMNASIUM AND OBERREALSCHULE.

a. General Aim of Instruction.

The aim of instruction is in general the same as in the Gymnasium, only it must here be carried out more completely and more comprehen-

sively. Training in seeing correctly and in the accurate freehand reproduction of the most varied solid objects, at first in outline and then more completely with light and shade effects and in colours. Practice in the geometrical representation of bodies and introduction to descriptive geometry, sciography, and perspective.

B. Remarks.

As in the Gymnasium, copy slips are not to be used for freehand drawing, but large wall copies and solid objects. Taking measurements of the model and using any kind of mechanical means, such as compasses and ruler, are to be altogether prohibited. Individual instruction is given in drawing from objects.

The instruction is apportioned as follows:—

V. and IV.—Drawing of plane and curvilineal forms from wall copies, with practice in varying the forms presented, explained by drawings on the blackboard by the teacher. Drawing of plane ornaments and leaf forms.

III.—Drawing from simple and difficult models and plaster casts in outline. Not till some time later, exercises in the reproduction of light and shade from simple models.

In the Higher Classes.—Drawing in outline from plaster ornaments, and with attention to light and shade. Drawing from nature and objects of art industry. Practice in painting in water-colour from various objects, such as shells, fruits, flowers, plants, stuffed birds, etc.

Mechanical drawing begins in IIIA with practice in the use of drawing instruments for plane patterns, segments of circles and other rectilineal and curvilineal figures. In IIB comes the geometrical representation of simple bodies in plane and elevation, with sections and development of planes; and this is followed in IIA and I. by an introduction to descriptive geometry, light and shade, and perspective. The drawing of machinery and buildings from plans is excluded.

C. REALSCHULE.

A. General Aim of Instruction.

The aim of the instruction is the same as in the other Modern Schools, and is only limited by the termination of the instruction after six years.

B. Remarks.

Freehand drawing:—The foregoing general remarks hold good. The subject matter is divided among the different classes as in the other Modern Schools. In the highest stage, when accuracy in outline drawing has been attained, practice is given in the reproduction of light and shade, with the aid of models specially adapted to the purpose.

Mechanical drawing:—Practice in the use of instruments for plane patterns, segments of circles, and other rectilineal and curvilineal figures.

If more than two hours can be set apart for mechanical drawing in the higher classes, the geometrical representation of solids in plane and elevation, together with sections and development of planes, is added to the programme.

12.—GYMNASTICS AND DRILLING.

The aim of gymnastics and drilling is to promote the physical development of boys, to harden their bodies, to awaken courage and confidence in their own strength, and to ensure prompt decision and immediate execution by means of exercises selected and arranged for the purpose. At the same time the acquirement of dexterity in certain directions, especially with a view to future service in the national army, is to be aimed at.

This goal can only be attained if the instruction in gymnastics and drilling is based upon a definite scheme. The teacher must, after carefully thought out preparation, apportion the exercises to every single hour in such a way that they shall by their gradual succession and proper variation ensure the regular progress of all the pupils, and he must insist upon the latter carrying out all exercises with the exertion of their full strength as exactly and perfectly as possible. This does not hinder what is, by the very nature of the case, expressly aimed at, viz., that gymnastics should be carried out with freshness and good spirits, and should give boys the pleasure which is afforded by the feeling of growing strength, increasing confidence in the command and use of the limbs and the whole body, and above all the consciousness of youthful association for noble ends.

In the lower and middle stages drilling is to take the form of exercises in which the pupils all take part together under the immediate guidance of the teacher. In the higher stage the exercises can be done in sections as soon as the possibility presents itself of training by special instruction reliable gymnasts to act as demonstrators. In favourable weather, wherever it is possible, the classes are to be held out of doors.

A. Lower Stage.—Simple calisthenics and gymnastic drill; methods of marching; exercises with wooden and light iron staves. Easy combinations of these exercises. Exercises in jumping with the use of the swinging rope and springboard, and leaping over fixed obstacles. Exercises in climbing and swarming; simple exercises in hanging and supporting the body on the horizontal and parallel bars; exercises in balancing; easy exercises in swinging up on the horizontal bar.

B. Middle Stage.—Repetition of the calisthenics and gymnastic drill of the lower stage, and further development of them by more difficult figures and combinations. Exercises with iron staves.

Further exercises in gymnastics with the apparatus already used in the lower stage. In addition, storming-board (slanting spring board), buck, "Springkasten,"* and rings.

C. Higher Stage.—Further combinations of gymnastic drill. Iron staff and dumb-bell exercises, especially in connection with lunging movements, and under certain circumstances exercises with Indian clubs. In the combined drill attention is also to be paid to the purely military forms.

Further gymnastic exercises, with the addition especially of exercises on the horse, pole-jumping, javelin-throwing, etc. The particular

* A kind of padded boxes built up to various heights, and used for jumping.

branch of gymnastics for which each boy has a special taste is to be systematically cultivated.

In the lower stage attention is to be paid chiefly to calisthenics and drilling, in the higher stage to gymnastics.

Exercises in practical drilling and gymnastics are to be made a point of in all stages, and both long-distance running and sprinting are to be continually practised, and distance and pace gradually increased.

Athletic games, suitably chosen, are to be made a point of in all stages. Further directions for them can be obtained.

POINTS OF VIEW FOR THE REGULATION OF HOME WORK.

A. General.

The reduction in the weekly hours of work in school is not to be followed by an increase in home-work, but the loss is to be made up by improved methods of teaching. On the latter assumption, and with a restriction in the amount of subject matter to be committed to memory, some limitation even of the home-work hitherto demanded seems attainable.

While indeed our boys are to be trained from an early age to the strict fulfilment of their duty by regulated, systematically apportioned work at school and at home, the bodily conditions for a normal mental activity corresponding to the different ages must meanwhile not be neglected. The substance and the extent of the work exacted at school and at home come under consideration here especially. Since the school-work in the lower and higher stages has already, according to the time-tables and programmes of work, undergone a limitation, it will now have to be seen how far the same thing is possible with regard to the home-work also.

The Scientific Deputation, in its report of December 19, 1893, carefully fixed the limit of the total amount of school and home-work together that should be exacted in the lower, middle, and higher stages of our higher schools, but only for the higher classes did it expressly regulate the amount of work at eight hours a day. The latest Hessian regulation fixes as the extreme permissible limit of home-work—

Preparatory Schools	30 to 40 minutes a day.	
VI. and V.	1 hour	„
IV. and IIIb	2 hours	„
IIIa and IIb	2½ „	„
IIa and I.	3 „	„

Likewise the medical report for Alsace and Lorraine. All these individual regulations, however, as the Scientific Deputation pointed out at the time, are to a great extent mechanical, and, as experience proves, are often deviated from. The more recent memorial on the question of overburdening from the year 1883 (Wiese-Kübler, *Verordnungen und Gesetze* I., pp. 227 onwards) sums up all the important considerations which bear upon the case.

This is not the place to do more than put forward the points of view which are to serve as a guidance in determining the amount of home-work. Those points of view are as follows:—

1. All home-work is intended solely as a means (*a*) of inducing order and neatness (fair copies); (*b*) of having what is indispensable learnt by heart, and what has already been learnt thoroughly mastered; (*c*) of training boys to independent mental activity.

2. Accordingly home-work is to be considered as an essential supplement to the instruction given in school, especially for middle and higher classes; but it is to be determined with continual regard to that instruction and with due observance of the physical and mental development of the pupils as well as the capacity of boys of their age.

3. A part of the written work hitherto done at home can be transferred to school if the instruction is managed properly and methodically. *Cf.* B.

4. Unwritten home-work, as far as the learning by heart of what is indispensable and the mastery of what has already been learnt is con-

cerned, is simplified to the same extent as the matter to be learnt by heart in all stages is reduced. Such a reduction is to be especially kept in view in setting work to be learnt by heart in religion, German, foreign languages, history, geography, natural history, and chemistry.

5. An effective means of reducing home-work is the close methodical connection of related subjects with one another and the corresponding grouping of matter. This, however, can only be effected if, at any rate in the lower and middle stages, the language and history teaching on the one hand and the mathematical and science teaching on the other in every class are entrusted as much as possible to the same teacher.

B. Special.

A. Lower and Middle Stages. Home-work can be materially reduced, provided that

α In VI. and V. in German and the respective foreign languages the work set is *in the main* restricted to fair copies, reproducing the written exercises that have been already done in school, either in the exercise books or on the blackboard;

β In IV—IIb German essays to be written at home are only set once in four weeks, but side by side with them short compositions on extracts that have been gone through from German, foreign languages, history, and geography, or natural science are done in class;

γ Home preparation of harder writers, especially in the early stage of reading, is only set after preparatory guidance by the teacher in class;

δ Involved arithmetical and mathematical problems are as much as possible avoided, but in any case only set for home-work after they have been previously explained by the teacher in class.

B. Higher Stage. α In the Gymnasium all home exercises, which have hitherto been necessary for the Latin essay and for the Greek and French promotion work, cease. The other exercises in class and the home compositions remain. Translations to be done into foreign languages are as a rule only to be set from the teacher's dictation and in connection with the reading.

β. The German essay, which in this stage aims particularly at training pupils to independent work, but which is to be limited with great moderation in substance and scope, becomes more than ever the centre of all branches of instruction, from which the material for it is chosen. Not more than eight essays are to be set in the school-year (six at home and two in school). But alongside with them go short compositions in other subjects. *Cf.* A. β.

In mathematics—and in the Modern Schools in natural science also—side by side with the regular exercises in class, problems—not too hard—to be worked out independently at home, are to be set not more than once in every four weeks.

Systematic private reading in German and foreign languages forms the necessary supplement to the school work in the higher classes. This reading is to be guided methodically, the pupil being allowed a certain freedom of choice, according to his individuality, in order that the proper interest in it may be awakened and the work be made a pleasure. The training of voluntary independent activity is above all to be kept in view.

It is left to the teacher to decide how far it is expedient to turn the private reading to account for voluntary essays in German.

III.—EXPLANATIONS AND PRACTICAL DIRECTIONS FOR CARRYING OUT I. AND II.

1. An essential principle of the new curricula is the line drawn at the end of the sixth year's course in all higher schools.

It is shown by the statistics (drawn from all higher schools in Prussia) of pupils who left in the school-year 1889-90, that out of a total number of 135,337 pupils in attendance the number that entered upon life was 20,038, viz.:—

A. With complete certificates	4,105
B. With certificates for "one year's military service"	8,051
C. Without reaching this standard	7,882

i.e., in all higher schools only 20·5 per cent. attained the normal highest standard of the schools concerned, 40·2 per cent. were contented with the certificate for one year's military service, while 39·3 per cent. left school without even that.

From Class IIB alone 4,997 left with the certificate for one year's military service, *i.e.*, 25 per cent. of all the pupils that left; and of these only 368, namely, those who had attended the (higher) middle-class schools (höhere Bürgerschulen), obtained a comparatively complete course of training. Other years give much the same percentages.

In spite of these significant figures the scheme upon which all our higher schools, with the exception of the higher middle-class schools, have up to the present time been organised has been such that the educational needs of those 20·5 per cent. of pupils have formed the sole standard by which the curriculum has been determined. This is a state of things which the Education Department considers itself solemnly bound to put an end to. It is true that the 39·3 per cent. who leave before they reach IIB, without obtaining the certificate for one year's military service, must here be left out of consideration, as not properly belonging to this class of schools. On the other hand, it is indispensable for the sake of the 40·2 per cent., or, at least, the 25 per cent. who enter upon life immediately after passing through IIB, to draw a line somewhere in the school course, marking the end of a curriculum complete as far as it goes. The school work is thus divided into a lower and a higher stage, and the practical working of the arrangement is shown in the programmes referred to in 3 (below). A necessary consequence of this delimitation is the separation in history and geography as well as in mathematics of IIB and IIA, which have hitherto in many schools been taught in the same class-room.

Accordingly it is decreed that this separation shall be carried out for the school year 1892-93.

A further separation of IIB and IIA in one or other of the scientific subjects, with due regard for the general educational requirements and the number of pupils in the classes concerned, is held over for consideration in the immediate future.

As regards the already existing division into IIIB, IIIA, and IIB, IIA no change is to be made.

It is further decreed that all seven-stage higher schools shall become six-stage schools at the beginning of the 1892-93 school year, *i.e.*, that IIA shall be suppressed.

2. The School Council in each Province is empowered:—

A. In bilingual districts to increase instruction in German in VI. and V. by one hour a week, and so to raise the number of hours for these classes to twenty-six.

B. In all Modern Schools to interchange the number of hours allotted to French and English, provided such a departure seems justified by the situation of the place in which the school is and by its business relations.

C. In all kinds of higher schools for the duration of one year to add one hour a week each to mathematics and natural sciences, and in Gymnasia to Latin and Greek also, by correspondingly diminishing the time given to the other subjects of the same group. It is also left to the discretion of the School Council for the Province to allow for a short time a further redistribution of the number of hours a week in the two groups mentioned, for the purpose of making up special shortcomings in a class.

D. In Realgymnasia to add one hour a week to Latin in IIB and IIA by a corresponding reduction of mathematics if the necessity arises.

In all these deviations from the time-tables it must be a condition that the attainment of the general aim of instruction in the subjects affected is not permanently prejudiced. The Provincial School Councils must from time to time, in the official returns which they have to send in, report on the deviations (under A—D) which they have acquiesced in on their own responsibility, and the grounds on which the changes were made and their results.

E. Moreover, the Provincial School Councils are empowered on their own authority to permit in their districts the special forms (given in the appendix to the time-tables A—D on page 7) of a common preparatory course for higher schools of different classes.

3. From the ulterior organisation explained in 1 there necessarily arises another delimitation of the programmes for nearly all scientific subjects in all higher schools (with the exception of the Realschulen); so that without prejudice to the attainment in schools with nine-year courses of the final and complete aim of instruction in the highest class, a comparatively complete course of training must be attained in all schools by the end of the sixth year. An attempt to bring this about is made in the present programmes, and in this connection attention may be drawn to the completion in IIA of the grammatical course in foreign languages which it involves, and to the line drawn at the same point in history and geography, in mathematics, and in the natural sciences.

It becomes the teacher's duty to work up to this line from the lower classes by methods conducive to such an end, and to attain it in the sixth year in a sound theoretical and practical knowledge. The supervising authorities will not fail to devote unflagging attention to this point in their visits of inspection.

4. Religious Instruction.

For Protestant and Catholic religious instruction refer to the "Aim, Programme of Work, and Notes on Method."

In arranging the programmes for religious instruction attention has everywhere been paid to the special aim which has been assigned to it in higher schools by the Royal Decree of May 1, 1889, and by the ministerial proposals which received the Royal Assent on August 30, 1889.

The Education Department lays particular stress upon the fact that religious instruction in the individual schools is not to be too desultory, and that it is not to be treated as a detached subject, but is to be brought in a natural way into the closest relations with all other subjects, especially the ethical ones. It is especially the business of headmasters and school councillors to work towards this end.

Closely bound up with the question of religious instruction is the consideration of the duty of the school with regard to its influence upon the character of boys.

If the higher school is to perform its task in this direction, it must maintain outward discipline and order, and foster obedience, diligence, truthfulness, and pure-mindedness; and it must from all subjects of instruction, especially those which deal with ethics, develop germs that shall be fruitful in the formation of character and manly endeavour. While in this way the youthful *mind* is filled with the highest moral ideas and its interest in them lastingly aroused, a definite bent towards this goal is at the same time imprinted upon the *will*.

The task thus set before the teacher is as full of difficulty as it is rich in reward, and he must constantly renew his efforts to accomplish it. It is self-evident that a sympathetic endeavour to understand the individuality of the pupil is necessary for its accomplishment.

A primary condition for even an approximate solution of the problem, especially under existing circumstances and with classes which are generally too numerous, is an earnest and conscientious preparation on the part of the teacher for his duties as an educator as well as a teacher. As the intending schoolmaster is now trained to carry out a methodical course of instruction, he will also have more and more to qualify himself for his task as an educator by making use of every means offered him at the University and during his period of probation, as well as by his own observation and experience. He must always bear in mind that his own example will first and foremost exercise decisive influence upon his success.

A further condition is that the whole staff of teachers should direct their united efforts to the same end, and thus give a definite tendency to the tone of the school.

The attainment of this end is further facilitated by strengthening the influence of the class-masters and extending their range of instruction so as to reduce the necessity for employing so many teachers of special subjects, particularly in the lower and middle classes. The way in which the instruction in these stages is now so often split up among too many teachers is a hindrance to all lasting educational influence; likewise the change of the class-master from stage to stage, which is so frequent.

More effectual means must be taken to remedy this unsatisfactory state of things, which was strongly referred to as early as 1837 in the circular report of the 24th of October in that year (Wiese-Kübler, *Verordnungen und Gesetze* I., p. 56). The School Councils for each Province are therefore directed, when approving the curricula for individual schools, which are to be sent in yearly, to pay strict regard to whether a teacher who is proposed for a class-mastership is properly qualified for it, and to see that he has work in his class in the whole range of subjects so far as is compatible with his qualifications or the practical proof of ability that he has given. In so far as the scientific training of teachers is at present inadequate for a fairly extensive employment in *one* class, care will be taken to remedy this defect.

It is above all the duty of the class-master to keep in touch with the parents of his pupils, and to assist them with advice and practical help. In this he can in most cases count upon ready co-operation.

The fact of the pupil belonging to a definite Church community renders it a part of the duty of the school not only to remove all obstacles in the way of his active participation in the religious observances of his Church, but also, so far as the school arrangements are not thereby disturbed, to promote this participation in a positive manner. The Staff will, of course, gladly co-operate to further the attainment of this aim as far as possible.

5. German.

German has, by the increase of the number of hours a week assigned to it, especially in the Gymnasium, received a further impetus. It is even more than heretofore made the centre of the whole instruction, and the work done in it is of decisive importance in the leaving certificate examinations; so that, in fact, a pupil who does not give satisfaction in his general work in German is henceforth declared to have failed in the examination.

The special task, assigned to this branch of instruction, of fostering patriotic feeling and national sentiment, renders a close connection between German and history indispensable. By conjuring up a living conception of German heroic legends, together with their background, the Northern legends, German forms the groundwork for instruction in German history, as well as making it fruitful and full of living interest by introducing boys to the most important works of genius in our literature.

By a systematic cultivation of translations into German from foreign languages, which are not only correct but in keeping with the spirit of our language, as well as by the regular German compositions in class already provided for in most of the other subjects, special assistance towards practice in written expression ought to be thoroughly assured. The same thing is done for oral expression by regular practice in *viva voce* exercises (in translation and reproduction of what has been taught). One of the principal cares of the teacher must be to take full advantage of these means of cultivating the power of expression.

The historical narrations in connection with German instruction in VI. and V. afford at the same time suitable material for oral or written reproductions, as the case may be.

Where teachers are available who have had the necessary training to enable them to give elementary instruction in philosophy, it is at the discretion of headmasters to allow the elements of it to be taught in Class I. in connection with some definite data such as, for example, is afforded by Plato's Dialogues.

6. Latin.

The reduction in the hours for Latin by 15 a week in the Gymnasium and by 11 in the Realgymnasium has been rendered necessary by the imperative demand for a reduction of the total number of hours' work and for an increase of time for gymnastics. In addition to this there was also in the Gymnasium the necessity of strengthening German and drawing and of including English in the time-table.

Such a considerable reduction of the hours per week necessitated an alteration in the aim of instruction. In the Gymnasium, after the suppression of the Latin essay, perfection of style, to the extent hitherto

demanded, had to be renounced—a renunciation which was in any case necessitated by the diminishing value set upon the practical use of Latin and the decreasing mastery of it even in learned circles and among teachers.

Comprehension of the more important classical Latin writers and that mental discipline, which, according to experience, is afforded by the thorough study of the ancient languages, is the general aim of this instruction. Within these limits the important task assigned to this subject is to be accomplished in future in spite of the reduction of hours. This, of course, can only be done if, as has already been prescribed, the grammar and vocabulary to be acquired are limited to what is regular and necessary for accurate reading, and if the written exercises are adapted solely to the attainment of the general aim of instruction. The single hour which in future is still left in the three upper classes for grammatical recapitulations and oral and written exercises is intended to serve the double purpose of maintaining the accuracy which has already been acquired and of saving the reading from being constantly interfered with by references to grammar. It will be the duty of headmasters and supervising authorities energetically to oppose all attempts which tend to overstep the limits thus laid down for the written exercises and interrupt the reading of authors by the introduction of grammatical explanations which are not absolutely necessary for the comprehension of the author.

Side by side with written translation into Latin an equally important position is given, in pursuance of the general aim, to translation from Latin into German. And thus the exaggerated value set upon "extempore versions" (*i.e.*, compositions done in class) is abolished. Greater importance than hitherto is in future to be attached to a good German translation from the foreign language, both in the certificates and promotions and in the leaving examinations. In order to lead systematically from the lower classes upwards to such a consummation, it is ordered that in every stage regular written translations from Latin shall go on side by side with the translations into Latin.

The authors and writings prescribed in the programmes for Latin and Greek are those which *must* be read in the school-years to which they are assigned. To these, however, the Provincial School Councils are empowered to permit others to be added, provided that they are suitable in form and matter for school reading in the stages for which they are set, and that a good acquaintance with the authors prescribed as obligatory for the class is not interfered with by this intended course of reading.

As far as the Realgymnasium is concerned the proposed restoration of the weekly number of hours to virtually the same limit as in the "Regulations for Instruction and Examination" issued in 1859 at once necessitated a limitation of the aim. In spite of that reduction a thorough comprehension of easier passages of the authors read in Class I. can be attained because of the grammatical grounding which is ensured in VI., V., and IV. This is quite sufficient for the practical needs of these pupils.

For the method of Latin instruction see "Notes" on the programmes.

7. Greek.

Greek has lost four hours a week. Here, too, the amount of grammar to be learnt and vocabulary to be acquired has been limited, and the elementary written exercises in the lower stage determined

solely with a view to practice in the accidence and in the most important grammatical rules, and so brought within narrow bounds. In this way the certainty of attaining the sole aim of this instruction, viz., comprehension of the more important classical writers of Greece, seems to be assured, without the thoroughness of the reading being in any way diminished.

8. French.

The postponement of French in the Gymnasium, and consequently also in the Realgymnasium, to Class IV. was called for, because it had been shown by experience that the difficulties of beginning a fresh foreign language in two consecutive years in the lower classes were very great. Consequently in all Gymnasia and Realgymnasia from the school-year 1892-93 onwards French is to be omitted in V., and to be made up for, according to the new programme, by more extensive exercises in IV. From IIIb upwards it is left to the Provincial School Councils to gradually adjust the programmes for each class. The Fifth Class, which was formed at Michaelmas, and which has consequently only been learning French for half a year, is to give it up for the next half-year.

The reduction of the hours for French in all higher schools is occasioned solely by the necessity of reducing the total number of hours' work. The aim, which is limited to the practical written and oral use of the language, can be attained in consequence of the considerable reduction of the amount of grammar to be learnt and the steadily progressing improvement of the so-called "modern methods" (Neuere Richtung). The Educational Department feels itself strengthened in its confident expectation of this by the results already attained in many schools, and by the keen endeavour of modern language teachers to render themselves proficient in the practical use of foreign languages by every means at their command, both at home and abroad.

For the method of French instruction, and especially for the difference in the French programmes in non-Latin schools and those in which Latin is taught, see "Programmes of Work."

9. English.

In Modern Schools English has undergone only a slight reduction of hours per week, but in the Gymnasium it is to be taught in IIa—Ia as an optional subject. Consequently it is decreed that from the next school-year onwards it shall be begun in IIa and carried on continuously to Ia in all Gymnasia where it has not hitherto been studied, if the requisite teaching is procurable and the necessary funds are at hand. From the school-year 1893-94 onwards, so far as teachers possess the requisite qualifications, the directions given in 1 are to be followed.

For the province of Hanover the situation with regard to the generally compulsory character of the English instruction remains unaltered.

In those Gymnasia in which English has hitherto been taught in the earlier stages inquiries are to be made as to whether the need for it exists, and to what extent.

10. History and Geography.

For instruction in history and geography see generally "Programmes" and "Notes on Method." There also will be found the points of view which are to be considered as obligatory for the carrying out of the Royal Decree of May 1, 1889, relating to historical instruction.

The difficulties which arise in consequence of the change in the delimitation of the programmes for Classes III. and II. are to be overcome for the school-year 1892-93 as follows:—In Gymnasia the new programme is to be carried out in IIIb and IIb, but in IIIa and IIa where it first comes into force from 1893-94 onwards it will only be necessary to complete such parts of the programme hitherto apportioned to the two years of III. and II. as have not yet been gone through.

It is left to the Provincial School Councils gradually to make the necessary adjustments in the programmes for individual schools.

The new programmes for geography are to begin in the Sixth Class, and are to be gradually introduced throughout the school from that class upwards. It rests with the Provincial School Councils (with due regard for the apportionment of the subject which has hitherto held good) to allow the new programmes to come into force next year, even in classes above VI.

There is a special difficulty in the teaching of geography, owing to the difference in wall maps and atlases. In any change of materials it must be seen that all pupils have the same atlas, and indeed as far as possible in all classes. It is also very advisable in procuring new wall maps to see that the plan of these is as little different as possible from that of the atlases used by the pupils.

11. Mathematics and Natural Sciences.

With regard to mathematics and natural sciences, attention is directed to the "Programmes of Work" and the "Notes on Method."

Special attention is to be paid to the new provisions in the mathematical programme for the sixth year in all higher schools.

The elementary instruction in physics for IIIa in the Gymnasium commended itself on practical grounds.

So far as any adjustment of the old and new programmes is necessary in individual schools on account of the apportionment of the subject that has hitherto been in vogue, the Provincial School Councils must make the requisite arrangements.

12. Drawing.

The suppression of drawing in VI. is justified by the slight success which is shown by experience to have attended it in this stage.

The fact, on the other hand, of drawing having been made generally compulsory for two classes higher than before is due to the importance of the subject and the absolute necessity for it in most callings in life. It is therefore determined that in future, beginning from the next school-year, drawing shall be begun in all higher schools in the Fifth Class, and that from the same period it shall be generally taught in the Gymnasium as a compulsory subject in IIIb, and likewise be continued in the following school-year. In regard to any questions of extra expense refer to the Explanations to 1.*

Mechanical drawing, which has hitherto as a rule been compulsory in Oberrealschulen, will in future be treated as an optional subject, since pupils do not all take the same interest in it.

* Though not explicitly stated in 1, it is obvious that the provision of additional teachers and additional class-rooms involves extra expense, for which the school authorities have to make provision.—*The Translator.*

13. Gymnastics and Drilling.

The increase in hours for gymnastics and drilling in all kinds of higher schools is to be introduced at the beginning of the next school-year, so far as the requisite teaching and accommodation are available, and so far as the school finances are able to bear the expense. In the matter of extra expenses and the question of procuring accommodation from the year 1893-94 the same remarks hold good as for 1.

The division of the three hours for drilling and gymnastics into six half-hours is recommended in the lower stages.

More detailed instructions for the management of drilling and gymnastics are given on page 61 of the "Regulations for Drilling and Gymnastics."

The subject of School Hygiene is reserved for a special minute.

14. Polish.

14. As regards optional instruction in Polish, the matter stands as in the Report of June 22, 1889.

15. In order to protect pupils against overwork in the Gymnasium, it must be insisted upon that the same pupil may not as a rule learn both English and Hebrew, and that permission to learn them both can only be granted by the headmaster in very exceptional cases. In the same way it is left to the discretion of the headmaster to excuse certain pupils from singing in VI—I. No change is made with regard to the compulsory attendance at theoretical singing instruction of the pupils who are excused from practical singing in VI. and V.

16. As for the manuals, reading-books, and exercise-books, as well as other materials for instruction which are subject to the approval of the authorities—in the first place, those books, etc., which have been introduced into individual schools in consequence of the changes which have been made there are still to be used until further instructions—as has already been ordered by the Report of July 22 of this year (Unterricht II. 2,394). The determination of the date at which a change is to be made is for the present reserved, and attention is drawn to the fact that the Education Department intends to defer it until ample time has been given for the production of new books, etc., based upon practical experience. Lest, however, an impetus should thereby be given to the unhealthy production of books in this direction, the Department considers itself bound to say at once that it is determined, in the interest of the public, to put a stop to the recognised evils of the excessive number of school books and materials, and of the new editions of them which are frequently driving each other out.

In what way this will best be done is left for further consideration. For the present it is sufficient to draw the attention of Provincial School Councils to the two points of view mentioned, so that they may be guided by them in their future proposals as to the introduction of school books; and to recommend them, especially in respect to the second point, to use their influence to induce editors of school books about to be introduced to undertake to bring out new editions in such a way that changes in the form and matter shall be at once recognisable, so that the old editions can be used by the pupils side by side with the new ones.

17. For the nature and amount of lessons to be set as home-work the directions laid down in the "Points of View for the Regulation of Home

Work" are to be observed. Upon that basis, and with due regard for the special programmes drawn up for each school by the Provincial School Councils before the beginning of the school-year, the Staff must also for the future draw up a plan of work for each class with regard to the apportionment of home-work. In this, care must be taken to see that, allowing for ordinary average capacity on the part of the pupils, there is no overwork, and that sufficient time is left every day for recreation. The "Class Books," which are to be accurately kept, enable the headmaster and the class-master to keep an effective watch over the due observance of the amount assigned.

THE HIGHER SCHOOLS OF THE GRAND DUCHY OF BADEN; THEIR DEVELOPMENT AND ORGANISATION.

SUMMARY.

A.—INTRODUCTORY.

§1. The purpose and nature of the report.

B.—HISTORICAL.

I.—The various Types of Higher Schools.

§2. The Higher Schools of Baden from 1803 to the present time.
§2. From 1803-1830. The Gelehrtenschulen. Meaning of the term.
§3. Defects of Gelehrtenschulen.
§4. Opposition of University of Freiburg to measures of reform in Gelehrtenschulen.
§5. Reforms of 1837. Time-table of Gelehrtenschulen.
§6. Defects of Time-table of 1837.
§7. Reforms of 1869. Amended time-table of Gelehrtenschulen.
§8. Alteration in nomenclature of Gelehrtenschulen: The Lyceum to be called Gymnasium, and the seven-class schools Progymnasium.
§9. Final revision of time-table of Gymnasien in 1883. Present time-table of Gymnasien.
§10. Rise of "Real" institutions. The Höhere Bürgerschulen. Their twofold object.
§11. Tendency of Höhere Bürgerschulen to form two branches.
§12. Development of Realgymnasien from Höhere Bürgerschulen in 1868. The eight-class Realgymnasium of 1868; its time-table. The nine-class Realgymnasium of 1879; its time-table.
§13. Development of Realschulen from Höhere Bürgerschulen. Present distinction between Realgymnasium, Realschule, and Höhere Bürgerschule. The Oberrealschule (of Karlsruhe). The present time-table of Realschulen and Oberrealschule.
§14. Private Schools.
§15. The Höhere Mädchenschulen. Their time-table,

II.—Control of Higher Schools.

§16. Control in 1803. The Church Councils.
§17. Control in 1807. The General Educational Commission.
§18. Control in 1809. The Church Departments. The Kreisdirektorien.
§19. Control in 1836. The Higher Council on Education. Its duties and composition.
§20. Control in 1860. Central and undenominational. The Higher School Council created in 1862; its composition.
§21. The moral of the history of control.
§22. The last traces of denominationalism. Jews appointed as schoolmasters in Baden.
§23. The parent and the head master in Baden. The scare of overwork in 1880. Creation of the Beirat. Its duties and composition.

C.—THE HIGHER SCHOOLS OF THE PRESENT TIME.

§24. Enumeration of Higher Schools.
(Higher Schools can be classed under three heads as following curriculum of Gymnasium, Realgymnasium, or Oberrealschule.)
§25. The number of classes in Higher Schools.
§26. Age for admission into Higher Schools.
§27. Qualifications for admission.
§28. Hours of work. No overwork in Baden schools. Table (in note) of health of Oberrealschule.
§29. Main principles and methods of instruction in:
§29. *German.*
§30. *Latin.*
§31. *Greek.*
§32. *French.* The analytic method.
§33. *English.*
§34. *Mathematics.*
§35. *History.*
§36. *Geography.*
§37. *Natural History* and *Botany.*
§38. *Chemistry* and *Physics.*
§39. *Home Work.*
§40. The yearly examinations. Reports on progress of pupils. Placing of pupils in class order.
§41. Promotions. Table showing percentage of failures to obtain promotion.
§42. The "leave" in the Higher Schools. Statistical table.
§43. Stimulus to work. Punishments.

§44. The Leaving Examination (Reifeprüfung, Abiturientenexamen). How controlled. Work offered for examination. Table of subjects for written examination. Oral examination.
§45. The standard required in the various subjects of the Leaving Examination.
§46. Length of time allowed for paper work.
§47. Supervision during examination.
§48. Correction of papers. Marking of papers and oral work.
§49. Failure to obtain Leaving Certificate. Rareness of failure.
§§50—53. Privileges of Higher Schools.
§50. „ of Oberrealschule.
§51. „ of Realgymnasium.
§52. „ of Gymnasium.
§53. Result of uneven distribution of privileges. Table illustrating this unevenness and certain of its results.
§54. Physical training, and "out-of-school" control of boys.
§55. School fees; conditions for their remission.
§56. No entrance scholarships; few prizes.
§57. School inspection.
§58. The head master.
§59. The assistant masters. Professoren, Lehramtspraktikanten, Reallehrer, Religionslehrer.
§60. Assured position of masters.
§61. Salaries of masters. Illustrative table.
§62. Pensions.
§63. Provisions against neglect of duty on part of masters.
§64. Previous training of masters. Before 1889. The adoption of the Prussian system; its weaknesses.
§65. Suggestions as to previous training of masters made in Head Masters' Conference of 1896.
§66. Hours of work required of masters. Fewer than in England. The reasons for this. The importance attached in Baden to continued study on the part of masters. Encouragement given to study.
§67. Contrast with English schools in this respect.
§68. Original research work of Baden masters. Statistical table.
§69. Masters' Conferences. Concerning individual schools. Concerning all schools.
§70. Unity between (*a*) head masters and assistant masters, (*b*) head masters and central authorities as illustrated by these Conferences.
§71. Striking growth of respect for teaching profession in Baden. Reasons for this. A note illustrating the rise of schoolmasters in social and pecuniary standing since 1884.
§72 The Höhere Mädchenschule. Table illustrating salaries of teachers.
§73 Object of teaching in Höhere Mädchenschule. Quality of teaching.

§74 The Mädchengymnasium.
§75. The position of Baden among German States with regard to the "Real" movement. Influence strongly felt. Statistical table.
§76. But classical education not in any danger. Increase of numbers of "Real" pupils represents gain to numbers of Higher Schools in general, rather than loss to classical schools.
§77. Reason for Baden's "middle position" with regard to "Real" movement. Statistical table.
§78. The Reformgymnasium of Karlsruhe. Its rise, time-table, objects, claims, future.

D.—CONCLUSION.

§79. The high place held by Higher Schools of Baden. Certain further reasons for rapidity and thoroughness of school reform.
§80. The purpose of the remainder of this report.
§81. Physical training. The neglect of this in Baden. The desirability of reform in this direction. The prospect of reform.
§82. The preliminary training of masters. Further remarks as to the opinion of Baden educationists upon their own system. The advantage which Baden masters hold over ours by virtue of preliminary training. Advantage of Public School and University training to English master.
§83. Relation of assistant masters to head masters in Baden. Both equally dependent on State. Head master's authority not weakened thereby. And there is a gain to the cause of Higher Education.
§84. The unity of all concerned with Higher Education in Baden. Contrast with England.
§85. Are individual enterprise and experiment furthered or hampered by central control?
§86. Uniformity of time-table, as affecting the individual boy. System of promotion on general merit contrasted with specialisation. Specialisation and cramming in England. Work of School and University does not overlap in Baden.

THE HIGHER SCHOOLS OF THE GRAND DUCHY OF BADEN; THEIR DEVELOPMENT AND ORGANISATION.

Note.

[A Higher School* (called in Baden Mittelschule) is distinguished—

(*a*) from an Elementary School (Volksschule) by the extent of its teaching, which goes beyond the limits of that prescribed for the Elementary Schools;

(*b*) from the Universities and University Schools (Hochschulen) by the more preparatory nature of its teaching;

(*c*) from Special (technical) Schools by the purpose of its teaching, which is to impart a general mental culture.]

A.—INTRODUCTORY.

§ 1. Students of Education in Germany and in England have been brought into closer contact by the events of recent years. The secondary schoolmasters of Germany have displayed a livelier interest in our school athletics, and this has been reciprocated by a nearer inquiry on our part into their methods of teaching and organisation. It is agreed in Germany as well as in England that there is need of secondary school reform, and the opinion is generally held that reform should proceed in each country upon the lines of a combination of the school systems of both. It is commonly our practice to turn to Prussia in eliciting information about German secondary schools, and naturally, since not only is Prussia's school system both admirable and instructive, but she exercises a wider and more powerful influence in matters educational than do her sister States. But it would, of course, be wrong to consider the Prussian Higher Schools as completely representing the Higher School system of Germany as a whole. Each State in Germany has its own system, and each system its special features of interest. And it is probable that of all the German States there is none more worthy than the Grand Duchy of Baden to be brought before the notice of English schoolmen, more especially now when the air is full of rumours of English school reform. The history of the Higher Schools of Baden from 1803 to the present day, and particularly during the last forty years, is a splendid record of the progress that can be made in the face of serious difficulties and opposition when zeal is accompanied by unity. The condition of the English Higher Schools in 1897 is not lacking in points of resemblance to the condition of Baden's Higher Schools some sixty years ago. It would almost seem indeed as though we were now starting where Baden at that time started. It is at all events not without significance that the resolution recently proposed by Dr. Fearon at the English Head Masters' Conference was expressed in almost the very words of the resolution

* Joos, "Die Mittelschulen im Grossherzogtum Baden."

adopted by the Baden Second Chamber in 1831.* In the light of this fact the development and progress of the Higher Schools of Baden surely acquire a special interest, and it is hoped that this may serve as an apology for confining a subject of such magnitude to the few pages of this report, and for presenting only in rough outline a picture that contains for all school reformers much of encouragement and example.

B—HISTORICAL.†

I.—The Various Types of Higher Schools.

§ 2. In 1803 the State of Baden was wrought out of a heterogeneous mass of petty Powers into its present form. At this date and till 1830 the so-called Gelehrtenschulen were the only Higher Schools in the land. Gelehrtenschulen included Lyceen (the present Gymnasien), Gymnasien (the present Progymnasien), Paedagogien and Common Latin Schools, with respectively a nine years, seven years, five years, or shorter courses of teaching. The task which the Gelehrtenschulen set before themselves was to lay in the youth of Baden the "foundation of higher culture, to thoroughly prepare them for the independent study of the sciences at the University, and to develop their religious and moral sense."

§ 3. The object of the Gelehrtenschulen was admirable, but their nature made it impossible of attainment.

The Higher Schools in the various districts which had in 1803 been welded into the State of Baden, revealed the widest diversity in organisation and in teaching. Some were under Catholic, some under Protestant control. A Protestant Gymnasium might differ essentially from a Catholic School of the same name, and a like difference might be found between two Protestant or two Catholic Gymnasien. Small wonder then that we find the efforts of Baden schoolmen during the next thirty years mainly directed towards procuring for the schools an uniform system of teaching.

§ 4. The greatest hindrance in the way of reform was the University of Freiburg. Freiburg administered a two years' "course

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* It is worth while to compare these two resolutions:

Dr. Fearon's resolution:—

"That, in the opinion of the Conference, the establishment of a central educational authority, on the general lines recommended by the Royal Commission on Secondary Education, is the essential starting-point in any sound movement towards the reform of secondary education."—December, 1897.

Resolution adopted by Baden Second Chamber:—

"That the construction of a special Educational Section to assume the control of the classical schools must be considered not only as in the highest degree desirable, but also as a condition necessary to the success of all further measures for reform."—September, 1831.

Cp. § 19 of this report.

† Cp. Aug. Joos, "Die Mittelschulen im Grossherzogtum Baden." G. Wendt, "Die Organisation des höheren Unterrichts im Grossherzogtum Baden."

of philosophy" to such pupils of Gelehrtenschulen as preferred to enter the University directly from a (7 class) Gymnasium, *i.e.*, at the age of 16–17, and with the education of a scholar of the upper-second class of a present-day Gymnasium. Of this "course of philosophy," it is sufficient description to say that it was an attempt to cram with advanced teaching boys who were too young to digest it, and who would have received far more profitable instruction in the higher classes of a Lyceum. And, at the same time, it formed a very great temptation to exchange school routine too early for the freer University life. But Freiburg, with the conservatism inherent in all Universities, jealously guarded her privilege, and it was not till 1837 that the two years' "course of philosophy" was finally abolished by ministerial decree. This, together with the frequent attempts made from now till 1857 to re-introduce such an educational anomaly, shews the reluctance with which Freiburg turned from her errors, and how readily she would have turned to them again.

§ 5. The decree of 1837 ordained further that all who purposed to study at either of the Universities (Freiburg and Heidelberg) must pass a qualifying examination; *i.e*, either the leaving examination of a Lyceum, or the equivalent "Maturitätsprüfung." This examination was to be passed either after the completion of the nine years' course of a Lyceum, or, in the case of boys who entered an University from a seven-class school, after a special preliminary course of three semesters at that University. Lastly an uniform curriculum was drawn up for the Gelehrtenschulen. It was as follows :—

TIME-TABLE OF 1837.

Subjects.	No. of hours per week in class.									No. of hours per week in all classes.
	I.	II.	III.	IV. inf.	IV. sup.	V. inf.	V. sup.	VI. inf.	VI. sup.	
Religion	3	3	2	2	2	2	2	2	2	20
German	3	3	2	2	2	2	2	—	—	16
Latin	9	9	8	8	8	8	8	7	7	72
Greek	—	—	—	4	4	5	5	4	4	26
Hebrew (voluntary) ...	—	—	—	—	—	2	2	2	2	8
French	—	—	4	4	4	3	3	2	2	22
Mathematics	4	4	3	3	3	4	4	2	—	27
Natural History	—	—	2	2	—	2	2	—	—	8
Physics	—	—	—	—	2	—	—	—	4	6
Geography	2	2	3	3	3	—	—	—	—	23
History	—	—				2	2	3	3	
Study of Antiquity in connection with Latin, Greek, and History.										
Rhetoric and History of German Literature ...	—	—	—	—	—	—	—	4	3	7
*Philosophische Propaedeutik	—	—	—	—	—	—	—	3	3	6
Caligraphy	3	3	2	—	—	—	—	—	—	8
Total	24	24	26	28	28	30	30	29	30	249

* Note on p. 330.

Other subjects were Drawing (compulsory only in the four lowest classes) and Singing. For each of these subjects two hours a week were allowed in every school class, and "the suitable arrangement of the pupils in special Drawing and Singing classes was left to the masters." The boys were also to be provided with the opportunity of practising gymnastic exercises under the supervision of a master, and, lastly, English and Italian were to be taught in schools where the necessary money was forthcoming.

§ 6. With the adoption of this curriculum a decisive step forward had been made. But a glance at the details will show that its chief merit lay rather in its uniformity than in its excellence. Though the time-table of the schools aimed at a complete classical training, it apportioned to Greek only four or five hours in each of the six upper classes, or a total in the whole school of twenty-six hours Greek teaching per week, as compared with a weekly modicum of seventy-two hours in Latin. If this was all that the friends of Greek cared to propose for tuition in that language, it is not surprising that its enemies came forward with proposals in 1837 to make it a voluntary subject in the highest school class, and somewhat later to retain it as a compulsory subject only for future students of Philology and Theology. This was not all. "The instruction in Rhetorik and Philosophische Propaedeutik," says Wendt, "was a pure and simple waste of time, nor did the mathematical or science teaching produce any satisfactory result." Still, the time-table of 1837, practically unaltered, remained in force till 1869, though in 1864 an important addition of six hours per week was made to the time bestowed on Greek teaching.

§ 7. In 1869 were issued two decrees, which established the classical schools of Baden upon their present basis. The one is the Supreme Decree (Landesherrliche Verordnung) of October 1st, 1869, and deals with the general organisation of the schools. The other is the Ministerial Decree (Ministerialverordnung), of October 2nd, 1869, concerning the school time-table and regulations, and the leaving examination. From the latter the revised time-table is reproduced. It differs from that of 1837 in the following points: a greater amount of time is devoted to German, Greek, Mathematics, and Natural Science, Rhetoric disappears, and Philosophische Propaedeutik receives but two instead of six hours per week. The time allotted to Religion and French is slightly lessened. Gymnastics are adopted as a compulsory subject.

TIME-TABLE OF 1869.

Subjects.	Hours per week in class.									Hours per week in all classes.
	VI.	V.	IV.	III. lower	III. upper	II. lower	II. upper	I. lower	I. upper	
Religion	2	2	2	2	2	2	2	2	2	18
German	4	4	2	2	2	2	2	3	3	24
Latin	9	9	9	8	8	8	8	7	7	73
Greek	—	—	—	6	6	6	6	6	6	36
French	—	—	4	3	3	3	3	2	2	20
History	—	—	2	2	2	3	3	3	3	18
Geography...	2	2	2	1	1	—	—	—	—	8
Mathematics	4	4	3	4	4	4	4	3	3	33
Natural Science	2	2	2	2	2	2	2	2	2	18
*Philosophische Propaedeutik...	—	—	—	—	—	—	—	1	1	2
Hebrew (voluntary) ...	—	—	—	—	—	(2)	(2)	(2)	(2)	(8)
Caligraphy	3	3	2	—	—	—	—	—	—	8
Drawing (voluntary above Class III)	2	2	2	2	2	(2)	(2)	(2)	(2)	10 (18)
Singing	2	2	2	2	2	2	2	2	2	18
Gymnastics	2	2	2	2	2	2	2	2	2	18
Total Hours for Scientific Subjects	23	23	26	30	30	30	30	29	29	250
Total Hours for all Subjects	32	32	34	36	36	34	34	33	33	304

English was only included in the time table of schools where there was special need of it, and the central educational authorities reserved to themselves, in all cases, the right of deciding whether it should be taught or not.

§ 8. In 1872 a wish was expressed by the Imperial Government for greater similarity between Baden and North Germany in the naming of schools and of school classes. In answer to this wish, it was ordained by a ministerial decree of July 11th, 1872:

(1) That "the complete Gelehrtenschule with a nine-years' course, hitherto called Lyceum, be henceforth called Gymnasium, and that the Gelehrtenschule with a seven years' course, hitherto called Gymnasium, be henceforth called Progymnasium."

* Philosophische Propaedeutik is thus explained in the "Ministerialverordnung den Lehrplan, die Schulordnung und die Abiturientenprüfung der Gelehrtenschulen beteffrend, vom 2 October, 1869." (A. § 13.)

PHILOSOPHISCHE PROPAEDEUTIK.

"This subject includes Empirical Psychology and Formal Logic. To the former can be joined an introductory sketch of the nature and aim of Philosophy. The latter is to be accompanied by practical exercises, viz., (*a*) rhetorical tasks, (*b*) analysis of written matter. At the end of the whole course a short review of the Sciences and of the Methodology of academic study is to be given."

(2) That "the classes of Gelehrtenschulen be in future named from the lowest upward to the highest: Sexta, Quinta, Quarta, Tertia B and A, Sekunda B and A, Prima B and A." (The B and A classes are also called Unter and Ober Tertia, etc.)

§ 9. In 1883 the time table of 1869 was finally revised and amended, and received the form which it bears at the present time. The changes introduced did not materially alter the programme of 1869 in any important point. They were largely the result of an inquiry made into the possible grounds of the outcry which was at the time raised by press and public against the supposed evil of overwork in the Gymnasien. Their nature seems to prove that this outcry was ill-founded, for though the weekly total of the school hours was lessened by eleven, the subjects requiring home preparation lost only three hours, while the remaining eight were taken from writing and singing.

The time-table at present enforced in all the Gymnasien and Progymnasien of Baden is as follows :—

TIME-TABLE OF 1883.

Subjects.	No. of hours per week in class.									Total of Hours per Week.
	VI.	V.	IV.	III. Unter.	III. Ober.	II. Unter.	II. Ober.	I. Unter.	I. Ober.	
Religion	2	2	2	2	2	2	2	2	2	18
German	3 formerly 4	3 formerly 4	2	2	2	2	2	3	3	22 formerly 24
Latin	9	9	8 formerly 9	8	8	8	8	7	7	72 formerly 73
Greek	—	—	—	6	6	6	6	6	6	36
French	—	—	4	3	3	3	3	2	2	20
History	—	—	2	2	2	3	3	3	3	18
Geography	2	2	2	1	1	—	—	—	—	8
Mathematics	4	4	3	3 formerly 4	3 formerly 4	4	4	4 formerly 3	4 formerly 3	33
Natural Science	2	2	2	2	2	2	2	2	2	18
Philosophische Propaedeutik	—	—	—	—	—	—	—	1	1	2
Hebrew (voluntary)	—	—	—	—	—	(2)	(2)	(2)	(2)	(8)
English (voluntary)	—	—	—	—	—	(2)	(2)	(2)	(2)	(8)
Caligraphy	2 formerly 3	2 formerly 3	— formerly 2	—	—	—	—	—	—	4 formerly 8
Drawing	2	2	2	2	2	(2)	(2)	(2)	(2)	10 (+ 8)
Singing	2	2	2	— formerly 2	— formerly 2	2	2	2	2	14 formerly 18
Gymnastics	2	2	2	2	2	2	2	2	2	18
Total	30	30	31	33	33	34	34	34	34	293
Former Total	32	32	34	36	36	34	34	33	33	304

§ 10. We have seen that before 1830 there was as yet no outward sign in Baden of the conflict at present raging in Germany between classical and modern-side education. In 1834 was issued a Supreme Decree regarding the establishment of the earliest class of Baden's "real" institutions, namely, the Höhere Bürgerschulen (Higher Citizen Schools). These schools were a development of the lowest division of the Gelehrtenschulen—"the Common Latin Schools"—and in their complete form had five classes, to which they might add a sixth, if they controlled the necessary funds. Their object was two-fold. They were to satisfy the wants of young people who had more time to devote to study than was claimed by the elementary schools, and who "elect to follow a citizen calling, which demands a higher mental development, and a more comprehensive preliminary knowledge." At the same time, they were to "curtail in no undue or detrimental manner the training of such young folk as desired to devote themselves to a learned profession," and they were further to prepare for the entry into the Polytechnic School. However, strict uniformity of curriculum was not enforced, indeed the Höhere Bürgerschulen were allowed considerable liberty in this point according to local requirements. For instance, "in towns where there are Gelehrtenschulen, the teaching of Latin in the Höhere Bürgerschule can be dispensed with."

§ 11. The very nature of the task set before them gave to the Höhere Bürgerschulen from their commencement a tendency to branch off in two distinct directions, according as some laid more weight upon the preparation for a learned profession and for the entry into the Polytechnic School, others upon the training for a citizen calling. The freedom granted them in satisfying local requirements made it the easier to yield to this tendency. But it was especially strengthened by certain alterations effected in the constitution of the Polytechnic School.

§ 12. To the Polytechnic School had been attached a preparatory school of two classes, into which boys could enter who had passed through the first five classes of a Gelehrtenschule, or a Höhere Bürgerschule. In 1865 the Polytechnic School was raised to the position of a "Technische Hochschule" and its Preparatory School was abolished. The "Technische Hochschule" included departments for the study of Engineering, Architecture, Forestry, Mathematics, Agriculture, Chemistry, Mechanics. According to regulations dating respectively from 1835, 1859, and 1860, no one could present himself for the State examination in the first three of these subjects who had not successfully passed through the class of a Gelehrtenschule corresponding to the present "Ober II.," or seventh class, of a Gymnasium. To pass the State examination was necessary in order to obtain a State appointment. The Höhere Bürgerschule possessed only five—in exceptional cases six—classes. In 1865 the citizens of Karlsruhe presented a petition to the Government praying that the Karlsruher Höhere Bürgerschule might be so

remodelled as to provide a suitable course of preliminary training for study in the Technische Hochschule, and after consultation with the authorities of the Technische Hochschule it was resolved to create "Realgymnasien," which were to do what the Höhere Bürgerschulen could no longer do, in other words, to "put a strictly scientific course of training within the reach of such young folk as wish to obtain appointments in the technical branches of the State administration," or to adopt a calling or trade demanding higher technical knowledge. The Realgymnasien received their constitution in 1868. They were fashioned from the Höhere Bürgerschulen of the two largest towns of Baden: Mannheim and Karlsruhe. Till 1879 they possessed classes representing eight consecutive school years, in 1879 a ninth class was added. A glance at the tables below will show the material changes effected in their original (1868) time-table in 1879, and, again, in the new time-table in 1887. Since then no further alteration has been made save the re-introduction of one hour of Singing per week into Classes III*b*. and III*a**.

The time-table drawn up in 1868 for the eight-class Realgymnasium included the following subjects:—

	No. of hours weekly in Class.								Total of hours per week in all Classes
	I. (lowest)	II.	III.	IV.	V.	VI.	VII.	VIII.	
Religion	2	2	2	2	2	2	2	2	16
German	4	3	3	3	3	3	3	3	25
Latin	8	7	6	5	5	3	3	3	40
French	—	5	4	4	4	4	3	3	27
English	—	—	—	3	3	3	3	3	15
Geography	2	2	2	2	—	—	—	1	9
History	—	—	2	2	2	2	2	2	12
Geometry and Trigonometry	—	1	1	2	2	3	3	2	14
Geometrical Drawing ...	—	—	—	—	1	2	2	2	7
Arithmetic and Algebra ...	4	4	4	4	3	3	3	3	28
Natural History	2	2	2	—	—	—	2	2	10
Physics	—	—	—	2	2	2	2	2	10
Chemistry	—	—	—	—	2	2	2	2	8
Caligraphy	2	2	2	—	—	—	—	—	6
Freehand Drawing	2	2	2	2	2	2	2	2	16
Singing	2	2	2	2	2	2	2	2	16
Gymnastics	2	2	2	2	2	2	2	2	16
Total of hours per week ...	30	34	34	35	35	35	36	36	275

In the time-table drawn up in 1879 for the nine-class school, the hours given to Latin in the first eight classes were increased by seven, and the time given to Physics and Chemistry was correspondingly lessened.

* To the remodelling of the Karlsruhe Realgymnasium into a "Reformgymnasium" reference is made later.

* PRESENT TIME-TABLE OF THE NINE-CLASS 'REALGYMNASIUM.

Subjects.	No. of hours weekly in class.									Total hours per week in all Classes.
	VI.	V.	IV.	III. Unter.	III. Ober.	II. Unter.	II. Ober.	I. Unter.	I. Ober.	
Religion	2	2	2	2	2	2	2	2	2	18
German	3 formerly 4	3	2 formerly 3	3	3	3	3	3	3	26 formerly 28
Latin	9 formerly 8	9 formerly 8	8 formerly 6	6	6	5	5 formerly 4	4	4	56 formerly 51
French	—	— formerly 4	4	4	4	4	4	3	3	26 formerly 30
English	—	—	—	3	3	3	3	3	3	18
Geography	2	2	2	2	2	—	—	—	—	10
History	—	—	2	2	2	formerly 1 2	2	formerly 1 2	formerly 1 2	formerly 13 14
Arithmetic and Algebra	4	4	3 formerly 4	2 formerly 3	2 formerly 3	3	3	3	3	27 formerly 30
Geometry	—	— formerly 1	— formerly 1	2	2	2 formerly 3	2 formerly 3	2	2	12 formerly 16
Geometrical Drawing	—	—	—	—	—	2 formerly 0	2	2	2	8 formerly 6
Physics	—	—	—	—	—	2	2	2	2	8
Chemistry	—	—	—	—	—	—	—	2	2	4
Natural History	2	2	2	2	2	formerly 1 —	formerly 2 —	—	—	formerly 7 10
Writing	2	2	— formerly 2	—	—	—	—	formerly 1 —	formerly 1 —	formerly 12 4
Drawing	2	2	2	2	2	2	2	2	2	formerly 6 18
Singing	2	2	2	— formerly 2	— formerly 2	2	2	2	2	14 formerly 18
Gymnastics	2	2	2	2	2	2	2	2	2	18
Total	30	30	31	32	32	34	34	34	34	291
Former Total	30	34	34	35	35	35	36	36	36	311

* The word "formerly" refers to the time-table of 1879.

§ 13. The rise of the Realgymnasien confirmed the Höhere Bürgerschulen in their tendency to divide into two branches. Some began to prepare their pupils exclusively for a learned profession, others for a citizen calling. The former, at first the majority, adopted the curriculum of the Realgymnasium as far as their smaller number of classes permitted. The latter banished Latin from their program and made English a compulsory subject. In no town of Baden, save Mannheim and Karlsruhe, has a Höhere Bürgerschule developed into a "Realgymnasium" with nine classes. But many schools, both of the Latin and the Latinless division, increased the number of their classes to six in their desire to be able to furnish their scholars with the certificate exempting from one of the two years of active military service, and of the Latinless schools several at the present time possess seven classes and one nine. Those schools of both divisions which remained content with four or five classes retained the name of Höhere Bürgerschulen. Those with six classes and the curriculum of the Realgymnasium are called Realprogymnasien. The Latinless schools with six or seven classes are entitled Realschulen. In 1893 the Realschule of Karlsruhe increased the number of its classes to nine, and adopted the name of Oberrealschule. Its example is being followed by all the seven-class Realschulen. The curricula of the Realschulen, at first varied in order to meet local requirements, were rendered uniform in 1885 by the general time-table for Realschulen, which was then issued. This time-table still obtains with very few alterations. Such changes as have been made in it date from 1893, when the formation of the Oberrealschule rendered a new and extended program necessary.

It must be further remarked concerning the time-table of the Oberrealschule that it provides a voluntary course of Italian in classes above III. A, and that it has quite recently formed three special voluntary Latin classes, whose object will be explained later. Lastly, in 1885, Dr. Firnhaber, the director of the then Realschule of Karlsruhe (present Oberrealschule), started a special commercial class, which now contains about twenty pupils. This class ranks between II. A and B, and professes the following subjects:—*Commercial Correspondence* (German, French and English); *German*; *English*; *Italian*; *Conversation* (French and English); *Book-keeping*; *History*; *Geography*; *Mathematics*; *Shorthand*; *Gymnastics*; which occupy a total of thirty hours per week.

§ 14. It would be beside the purpose of this report to enumerate the various private institutions in Baden for the training of boys and girls. Of the former kind there are few, of the latter more, the most interesting of which are to be found in Karlsruhe, and to one of which—the Mädchen Gymnasium—a later reference will be made.

§ 15. To complete the list of the Higher Schools forming part of the organised system of secondary education, it is only necessary to

* PRESENT TIME-TABLE OF THE OBERREALSCHULE AND REALSCHULEN.

Subjects.	Number of hours per week in class.									Number of hours in all classes.
	VI.	V.	IV.	III. Unter.	III. Ober.	II. Unter.	II. Ober.	I. Unter.	I. Ober.	
Religion	2	2	2	2	2	2	2	2	2	18
German	6 formerly 5	5	4 formerly 5	4	4	4	4	4	4	39
French	6	6	6	6	5 formerly 6	5	4	4	4	46
English	—	—	—	4 formerly 3	4 formerly 3	4	4	4	4	24
History	—	—	2 formerly 0	2	2	2	3	3	3	17
Geography	2	2	2	2	2	—	—	—	—	10
Natural History and Chemistry	2	2	2	2	2	—	—	—	—	10
With Mineralogy and Geology	—	—	—	—	—	2	2	2	2	8
Physics	—	—	—	—	2	2	3	3	3	13
Mathematics	5	5 formerly 4	5 formerly 4	5	5	5	5	5	5	45
Geometrical Drawing ...	—	—	—	—	—	2	2	2	2	8
Drawing	— formerly 2	2	2	2	2	2	2	2	2	16
Writing and Shorthand (voluntary)	2	2	2	—	—	(2)	(2)	(2)	(2)	6 (14)
Gymnastics	2	2	2	2	2	2	2	2	2	18
Singing is given in combined classes.										
Total	27	28	29	31	32	32	33	33	33	278
Former Total	28	27	27	30	32	32	33	33	33	275

* The word "formerly" refers to the time-table of 1885.

add the name of the Höhere Mädchenschulen (Higher Schools for Girls). These schools are to be found at a far earlier date under the title of "Höhere Töchterschulen," but it was not before 1879 that they received their present name and constitution.*

Their time-table, drawn up in 1879 and revised in 1892, is here reproduced. Its basis is the time-table of the Realschulen.

Subjects.	NUMBER OF HOURS WEEKLY IN CLASS.							Total of hours weekly in all Classes.
	VII.	VI.	V.	IV.	III.	II.	I.	
Religion	2	2	2	2	2	2	2	14
German	6	5	5	6	4	5	5	36
French	6	6	5	5	5	5	4	36
English	—	—	—	—	4	5	5	14
History	—	1	2	2	2	2	2	11
Geography	2	2	2	2	1	1	1	11
Arithmetic	3	3	3	3	3	2	2	19
Study of Nature	1	1	2	2	2	2	2	12
Writing	2	2	1	—	—	—	—	5
Drawing	—	—	2	2	2	2	2	10
Singing	2	2	1	1	1	1	1	9
Gymnastics	2	2	2	2	2	(2 + 1)	(2 + 1)	10 (16)
Needlework	4	4	3	3	3	(2)	(2)	17 (21)
Shorthand	—	—	—	—	—	—	(2)	(2)
Total	30	30	30	30	31	27	26	204
+Voluntary Subjects	—	—	—	—	—	(32)	(33)	(216)

II.—Control.

§ 16. Closely connected with the development of these various schools is the history of their control. This is divided by Joos into five periods :—

(1) In 1803 the care of all Church and School matters was put according to the creed which they concerned into the hands of :

The Lutheran-Evangelical Church Council in Karlsruhe ; the Reformed Lutheran Church Council in Heidelberg ; and the Catholic Ecclesiastical Commission in Bruchsal.

These three bodies were (Edict of 13 May, 1803) to consult together concerning the course they should adopt and follow, and "to lay before us in due season for final settlement their opinion, be it unanimous or divided."

* "Erlass des Grossherzoglichen Oberschulrats vom 8 Mai 1879."

§ 17. (2) The last words are significant, and we may conclude that out of them may be read the reason for the institution in 1807 of the General Educational Commission, which was to " care for the entire administration of all Higher Schools of all denominations, which schools are now to be placed under its sole control." The General Educational Commission consisted of a member of the Government as President, a second Government official (a so-called Referendar), and three Ecclesiastical Counsellors. As long as this Commission lasted it did good work, for the inquiries which it conducted immediately after its institution into the condition of the Higher Schools of the Grand Duchy " brought into clearest evidence the necessity *of an uniform curriculum for these schools and of a central supreme control.*" Its energy may have hastened its dissolution, which followed upon a Supreme Ordinance of November, 1809.

§ 18. (3) The whole conduct and control of the schools was now, according to their denomination, handed over to the Catholic and Evangelical Church Departments. At the same time were created with strange inappropriateness ten so-called " Kreisdirektorien," bodies composed exclusively of lawyers and officials of the Finance Department, which were to hold frequent inspections of the schools, and to see to it that the teachers conscientiously performed their duties. The General Educational Commission, shortly after the abrupt termination of its career, issued an apology, in which it expressed various apprehensions as to the efficiency of the new system of control and particularly of the " Kreisdirektorien." These latter apprehensions at least soon proved to be well founded, and in 1813 the Government deprived the Kreisdirektorien of their powers. But the evil was not mended, for the same powers were put into the hands of the two Church Departments of the Home Office. From that date, in fact from 1809, no further progress in school organisation was made until 1836.

§ 19. (4) It is under these circumstances hardly surprising to find the following resolution adopted by the Baden Second Chamber in September 1831:—" *That the construction of a special Educational Section to assume the control of the classical schools must be considered not only as in the highest degree desirable, but also as a condition necessary to the success of all further measures for reform.*" In 1836 these words were confirmed by deeds. The Educational Section was formed under the title of the " Higher Council on Education " (Oberstudienrat). The reasons for its

formation are expressed in the Supreme Decree of 21st April, 1836, in words which throw light upon the past period of stagnation:—"The difficulties which the suitable administration of the Gelehrtenschulen and Höhere Bürgerschulen experiences in the division of their control between the two Church Departments (or sections as they were now called), and the intention of ensuring in particular the adoption of an uniform curriculum." The duty of the "Higher Council on Education" was "the supervision and administration of the Gelehrtenschulen and Höhere Bürgerschulen." As president acted in alternate years the directors of the two (Catholic and Evangelical) Church Sections, both of whom were in 1850 required by decree to take part in all its debates. The other members were two priests, and four lay counsellors, two of classical and two of mathematical and science training. The control of the funds of the Higher Schools remained in the hands of the Church Sections, which in 1843 were made into two independent controlling bodies and took the name of Catholic and Evangelical Higher Church Council (Oberkirchenrat).

§ 20. (5) What was well begun in 1836 was completed in 1860 by the law of October 9, which "secured to the two Christian Churches the free and independent ordering and control of their own concerns." As a result of this law the Catholic Oberkirchenrat disappeared, and the Evangelical resolved itself into a purely ecclesiastical body. The future relation of Church and State in educational matters was clearly defined: Section 6, "The State assumes the administration of the public schools. All other educational establishments are under State supervision." Section 12, "The Churches watch over and provide for the religious teaching of their members, *but not to the detriment of the uniform administration* of educational establishments." The principle of central and undenominational control was thus finally adopted, and was given a material form by the construction of the Oberschulrat (Higher School Council) in 1862. To this body was entrusted by the Supreme Decree of August 12th, 1862, the supervision and control of all elementary and higher schools in point of both administration and finance. The Oberschulrat is composed of representatives of the Law and the Finance Department and the Schools. The Law supplies the president and one other member, the Finance Department one member, and the remaining six are either specialists in the teaching of classics, modern languages, mathematics and science, or

inspectors of elementary schools. And since 1868 extraordinary members can be appointed (*e.g.*, University professors, head masters of Gymnasien) for the purpose of taking part in the discussion of any important changes affecting the work of the school, or to attend the qualifying State examination of teachers. They also aid in conducting the inspection of schools and the leaving examinations.

§ 21. This brief sketch may have served to show that the history of the control of Baden's Higher Schools is mainly the answer to the question: What part is the Church to take in school organisation? The schoolmen of Baden soon adopted the view that Church and School, though working to one goal, reach it more quickly by different paths than hand in hand. With the greatest care the actual religious teaching of all boys and girls is provided for and administered by clergy of the various churches to which they belong. But since 1860 the central control of all schools, elementary and secondary, has been in the hands of the State. There are many observers who maintain that, by taking the lead in grasping the principle of central undenominational control, Baden has reaped reward in her striking educational development.

§ 22. The last trace of denominationalism in the Higher Schools disappeared in 1870. Up to that time, partly because of certain moneys and endowments appertaining to the Gelehrtenschulen, the masters in these schools had been exclusively Catholic or Evangelical according to the creed of the majority of the pupils. In 1870 it was ordained by a special law that masters of any creed might be appointed in any Gelehrtenschule, but that the money proceeding from funds and endowments of a denominational character should only be applied in payment of masters of the denomination in question. "This ordinance," says Wendt, "has been proved by its working to be entirely beneficial." It has also strengthened the spirit of religious toleration, for "since then several members of the Jewish faith have been included among the secondary school masters of Baden," and in this point the schools of Baden are probably unique among German schools.

§ 23. Under our secondary school system, if one may use that word, it may happen that a head master is to a large extent at the mercy of the parents of his pupils. A parent may say "either my son shall do this and that or he shall leave"; and head masters cannot always in the face of present-day competition resist this *argumentum ad baculum*. Under Baden's system such procedure on the part of parents is of course precluded. And it appears that the parents of Baden have at times feared the other extreme, have imagined that they were at the mercy of the head masters. "A good German," says Wendt, "never listens more willingly than when you explain to him that he has

reason to grumble." And we find the Baden parent at times grumbling very audibly, and loudest of all about 1880, when the complaint, general in Germany, that secondary school boys were overworked, had penetrated into the Grand Duchy. The educational authorities wisely saw that the most effective method of dealing with this and all similar complaints was to afford the fullest opportunity for their expression. They created in 1886 certain bodies bearing the name of Beirat (auxiliary council). The office of the Beirat is "to aid in the supervision and administration" of the Higher Schools. "To every Beirat belong as members the head master and one other master of the school to which it is attached, and from two to four residents of the town or district which the school represents. These latter are appointed by the Oberschulrat, but one at least must be proposed by the Town or District Council, and one must be a medical man. They hold office for six years. The Beirat is called into consultation upon general questions of organisation, concerning the up-keep and repair of buildings, sanitary precautions, the preparation of the yearly balance-sheets and estimates, the remission of school fees. Moreover, its consent to the expulsion of a pupil must be obtained; if it is refused the case is referred to the Oberschulrat for decision."*

C.—The Higher Schools of the Present Time.

§ 24. There are at present of Higher Schools in Baden:—

(*a*) *Gymnasien*† (or nine-class schools teaching Latin and Greek) at Bruchsal, Freiburg, Heidelberg, Karlsruhe, Konstanz, Lahr, Mannheim, Offenburg, Pforzheim, Rastatt, Tauberbischofsheim, Wertheim, and at Baden and Lörrach with Realprogymnasien—in all 14.

(*b*) *Progymnasien* (or seven-class schools, teaching Latin and Greek) at Donaueschingen and at Durlach, with a Realprogymnasium—in all 2.

(*c*) *Realgymnasien* (or nine-class schools, teaching Latin but not Greek) at Karlsruhe and Mannheim—in all 2.

(*d*) *Realprogymnasien* (or seven-class and six-class schools, teaching Latin but not Greek), at Ettenheim, with seven classes (in course of transformation into a school with non-Latin basis); at Weinheim and Mosbach, with six classes, and at Villingen (to become a six-class Realschule)—in all 4.

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* Wendt. "Organisation des höh. Unterrichts im Grossherzogtum Baden," p. 163.

† Wendt. "Organisation des höh. Unterrichts im Grossherzogtum Baden," p. 184.

(*e*) *Oberrealschulen* (or nine-class schools, teaching neither Latin nor Greek), at Karlsruhe (in 1896, on account of its increased numbers, the Oberrealschule threw threw out a branch seven-class Realschule)—in all 1.

(*f*) *Realschulen* (or smaller schools, teaching neither Latin nor Greek), at Karlsruhe, with seven classes; at Freiburg, Heidelberg, Konstanz, Mannheim, Pforzheim, with seven classes (all in course of extension into Oberrealschulen); at Bretten, Bruchsal, Kenzingen, Ladenburg, Müllheim, Schopfheim, Sinsheim, Uberlingen, Waldshut, and Baden (where the seventh class has not yet been formed)—in all 16.

(*g*) *Höhere Bürgerschulen*, (1) with curriculum of Realgymnasium, 2 with five classes, 1 with four classes; (2) with curriculum of Realschule, 7 with five classes, 4 with four classes—in all 14.

(*h*) *Höhere Mädchenschulen* (or girls' schools, with curriculum based on that of Realschule), at Baden, Karlsruhe, Konstanz, Mannheim, Offenburg, and at Heidelberg, and Freiburg, with a continuation course—in all 7.

A perusal of this list shows that, although there are seven kinds of boys' schools mentioned in it, they can be classed under three heads, according as they follow the curriculum of the Gymnasium, Realgymnasium, or Oberrealschule. These are the complete schools of their respective classes, and it will only be necessary to consider their working in order to get some insight into the inner organisation of the Higher Schools in general.

§ 25. The Gymnasium, Realgymnasium, and Oberrealschule have each nine classes, representing a course of nine school years. The classes are numbered upwards from VI. to I., each of the three highest (III., II., I.) having a lower and an upper division, and therefore representing two school years.

§ 26. The earliest age for admission into the lowest class is ten years, the latest twelve years.

§ 27. The qualifications for admission are reading, writing and arithmetic, that is to say, fluent reading of German in German and Roman printed characters, orthographical accuracy in dictation in German and Roman characters, and a knowledge of the four simple arithmetical rules in their application to abstract numbers up to 1,000.

§ 28. The hours of work are not excessive, as a glance at the time tables will show. It is commonly believed in England that all German schoolboys are overworked. This is by no means the case in Baden. Out of an average of about thirty school hours a week, four are devoted in every class to singing and gymnastics.

The school hour is really only a period of fifty minutes. In several schools the work is on four days a week distributed over five morning hours, so that the boys have four afternoons free. This plan has been adopted on account of certain experiments made in Heidelberg as to the comparative freshness of boys in the last morning and first afternoon hour, but the results of the experiments are not yet generally accepted as being conclusive. Not only is the number of hours of work in school moderate, but the greatest care has been taken to prevent the setting of an excessive amount of home preparation. In the Ministerial Decree of October 2, 1869, the extreme limit of time to be given to home preparation was definitely fixed for classes VI.—IV. at one and a-half to two hours, for classes IIIB. and IIIA. at two to two and a-half hours, and for classes II. and I. at two and a-half to three hours. The genuine anxiety of the head masters to provide against overwork at home as in school was clearly shown in 1883. In that year, as we have already seen, a complaint was made by many parents of overwork in the higher schools. Not only was the readiness of the head masters to meet the parents in any such matter shown by the calling of a special head masters' conference, to which also various medical authorities were summoned, but the result of the inquiry was to entirely acquit them of having countenanced the reported abuses in their schools. There was found to be only one class in which there was the bare possibility of any boy being overworked, and an alteration in the time-table promptly did away with this possibility. So far from there being at present any sign of overwork in the higher schools of Baden, those who visit them must be struck by the remarkable freshness of many of the classes.*

§ 29. The actual amount of work done in the various classes of the higher schools is roughly shown by the translations of their curricula, which are appended to this report. The following supplementary remarks† may serve to illustrate the main principles and the methods upon which the work proceeds.

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* The "Oberrealschule" publishes a yearly table of the health of its pupils. We find, selecting some of the last few years at random, the following percentages of absentees in all school classes :—

	June.	July.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.
1890–1 ...	2·2	2·9	1·3	2·5	2·7	4·4	4·2	3·8	3·9	2·5	2·3
1891–2 ...	2·3	3·2	1·9	2·3	2·7	4·2	2·9	3·4	3·5	4·1	2·8
1893–4 ...	3·5	4·2	2·5	2·8	3·7	5·8	5·3	2·8	3·2	2·3	2·3
1894–5 ...	3·2	3·4	2·1	2·3	2·2	3·1	3·4	4·1	4·2	2·9	2·5
1895–6 ...	3·8	1·1	2·5	2·3	1·8	2·6	3·9	5·2	4·3	2·9	3·2
1896–7 ...	2·6	3·9	2·1	1·6	2·8	3·9	2·5	2·7	3·6	3·5	2·4

† These remarks are based on Wendt "Organisation des höh. Unterrichts im Grossherzogtum Baden," pp. 175–81.

German.—The first object of the instruction in German is to impart to the pupil a ready facility of expression in grammatical language, both orally and in writing. Further, it is to develop his literary taste by making him acquainted with certain of the finest works of German literature, and through them with the outlines of German literary history. The works read in the highest class include some in older German, *e.g.*, the Niebelungenlied, and the poems of Walther von der Vogelweide, which are read in the original. In the two lowest classes of the Gymnasium a course of classical mythology is given; in the Realschulen a similar course of German mythology. The curricula of the Gymnasium and Realgymnasium are, as regards German, practically the same; in the Realschulen, where far more time is devoted to it, the subject is more fully treated in respect of both language and literature. The method of "The teaching of the mother-tongue in Germany" has been exhaustively described by Mr. Dale in the last volume of these reports. The points in it which would strike an English schoolmaster most forcibly are the care with which the boys are trained, from the junior classes upwards, to frame sentences and to give connected answers; the stress laid upon "Dispositionsübungen," or practice in the arrangement and analysis of the subject-matter of poetry or prose; the training in essay writing, which begins with exercises in what is practically the filling in of missing words in a short story, and ends with the full treatment of higher literary themes; the declamation of poetry and prose not only in the exact form of the original but also in the pupil's own words.

§ 30. *Latin.*—The objects of Latin teaching, according to the Ministerial decree of October 2, 1869, are to provide a basis for general grammatical study, and to encourage logical reasoning, and to impart that knowledge of the Latin language and literature which is an indispensable aid in academic studies. The latter object, it is held, cannot be attained without a careful grounding in the grammar. At the same time, care is taken, especially in junior classes, to avoid all parrot-like repetition of rules, the wording of which is a meaningless jargon to the learner, and which serve no other purpose than that of confusing and disheartening him. The example must precede the rule and the learning of the rule be gradual by means of the example. Boys are not wearied by excess of written exercises either in the lower forms or in the higher. Latin verses, in the case of many boys a mere piecing together of tags of parrot learning or an endeavour to make the line scan to the total neglect of every other consideration, are not taught. But Prosody is taught, at all events so far as to enable the higher classes to appreciate the rhythm of all metres they encounter in their authors. The written work of the lower classes—it must by no means be thought that written work is entirely neglected—consists largely of sentences illustrating grammatical rules. These are written occasionally during half an hour in class, and have the sole aim which they best of all means fulfil, of shortening the time that

must be taken from reading and given to grammar. Beyond this an exercise in Latin prose writing is done once a week by every class above VI., and this, at all events in the higher classes, forms part of the home work. The Latin essay has been abandoned. In the teaching of Latin Prose in classes IV. and III., books of ready-made exercises may be used, but the practice is not encouraged. It is held that as good or better results can be obtained if each master constructs his own exercises upon the basis of the work read in class. But the acquiring of a good style in Latin prose writing is not considered to be the most important detail of Latin teaching. More stress is laid upon the translation of Latin into German whether orally or upon paper. For it is by way of a comparison of the two languages that a pupil will best be enabled to enter into and appreciate the manner of thought of his Latin author, and such a comparison cannot be adequately made save in a wide course of reading. To aid this comparison it is as far as possible arranged that the German and Latin work in every lower class are under the control of one master. A point of no small importance in the Latin teaching is the insistence upon a clear, distinct and uniform pronunciation, especially in the lowest classes. It is true that the opinion of some English scholars and teachers (such as Professor J. B. Mayor) is against laying stress upon "minutiæ of pronunciation." Nevertheless, an accurate pronunciation is not hard to obtain if it is enforced from the beginning, and when obtained amply repays the labour of enforcing it. It is a safeguard against orthographical inaccuracies, many of which can be traced to the lax pronunciation or clipping of words, and it undeniably adds to the pleasure of reading. Slovenly or indistinct reading is not tolerated in any class, and similarly in all exercises in repetition a good delivery is considered of prime importance. The analytic method which has been found so efficacious in the teaching of modern languages is not employed in dealing with Latin. The difficulty of expressing modern ideas in the older language, and the unfamiliarity of most masters with conversational Latin, are obstacles which prove insurmountable. Nor is "Anschauungsunterricht" resorted to even to the extent of using illustrated books. Sporadic attempts have been made to treat the subject in part conversationally, and it is a pity that they are not more frequent. The admirable effect of the conversational method in securing a hold upon the interest of the pupil was amply illustrated to the writer of this report some few years back during a visit to the Wilhelms-Gymnasium of Berlin.

§ 31. *Greek.*—What has been said about the teaching of Latin applies in the main to the teaching of Greek. The latter subject is begun in the Under Third Class—*i.e.*, by boys of thirteen and upwards. The main object of the Greek teaching is to work the boys through as much of the standard Greek authors as is consistent with the avoidance of hurried reading, and thereby to give them an acquaintance with Greek thought and culture, and to develop their literary taste. Therefore though, as in Latin, a

start is made with grammar, the junior Greek class reads a sufficient amount of an elementary book to enable the second year class to master two books of Xenophon, while in the two following classes the whole of the Iliad, with some few omissions, is taken, besides prose reading. As great stress is laid in Greek teaching as in Latin upon a distinct, accurate, and uniform pronunciation, though, as regards the term "accurate," it should perhaps be remarked that the German pronunciation of both Greek and Latin is in some points arbitrary. The difficulty of accents is faced from the beginning. They are marked in reading, though not to the preclusion of rythmical scansion, and in the junior classes they are marked, not only by the voice, but also by an accompanying manual gesture. The writing of Greek prose or sentences forms part of the work of each class, but its importance as compared with that of translation from Greek into German falls into the background. It forms no part of the leaving (Abiturienten) examination.

§ 32. *French.*—The teaching of French differs somewhat in the various kinds of schools. French is a minor subject in the Gymnasium, but one of the chief subjects in the Realschulen, where it takes the place of Latin. In the Realgymnasium more time is devoted to it than in the Gymnasium, but far less than in the Realschulen. And we find that the objects of French teaching as professed by the three classes of schools differ correspondingly. The Gymnasium teaches its scholar the French grammar, and introduces them in the upper classes to selected works of French literature. It also practises them so far in conversation that the lessons in the upper classes can be at at all events partly taken in French. The Realgymnasium mainly follows the method of the Gymnasium, but includes French essays in its scheme of work, while in all classes from IIB. upwards the lessons are taken in French. The aim of French teaching in the Oberrealschule is as follows*: (*a*) To enable the pupils to acquire a correct pronunciation and power of expressing themselves connectedly in French upon ordinary subjects. (*b*) To thoroughly ground them in French grammar. (*c*) To cause them to read more important works of classical and more modern French authors, and to trace the development of French literature through its various stages. The written work leads up to the writing of essays on themes suggested by the reading. In the teaching of grammar a careful comparison between French and German is made, as in the Gymnasium between German and Latin. Lastly, *all* lessons are taken as far as possible in French. This is rendered possible by the employment of the so-called *analytic method* of teaching. This method has now for some years been in use in Baden, and was introduced on the suggestion of Dr. E. von Sallwürk. It starts from objects to be seen in the class-room—the sponge, the chalk, the blackboard, etc.—which are held up or pointed to by the teacher who

* *Cf.* Verordnungsblatt des Grossherzogl. Oberschulrats vom 10 April, 1895.

pronounces the French word for them very distinctly two or three times. Then certain of the pupils are called out of the class to point out the same objects in the order in which the teacher names them in French. There is no need to explain here how the names of these and similar objects are subsequently employed in connection with numerals, possessive adjectives and verbs. The secret of the method is that it regards the training of *the understanding* as of the first importance; that it follows the teaching of nature that children understand before they speak. Higher up the method is continued by the use of pictures accompanied by a book containing the same pictures on a smaller scale, but in the Oberrealschule it is not carried further than class IV. That is to say, that after three years of French the boys have made sufficient progress to understand a lesson taken in French and to converse with their master about the subject-matter of the work they are reading. It only needs a visit to the classes taught by Fräulein von Schmitz-Aurbach in the Höhere Mädchenschule of Karlsruhe to be convinced of the success of the analytic method in the hands of a capable teacher; and it is only right to state here in singling out one of many admirable teachers for special mention, that Fräulein von Schmitz-Aurbach was the chief pioneer of the method in Baden, and conducted the first experiments in it. The method is accompanied in the primary stages by a special reader. Practice in written work, other than the writing of words on the blackboard, is deferred till after the first three months.

§ 33. *English* is taught upon the same method as French, but more time is devoted than in the case of French to obtaining an accurate pronunciation, in regard to which English presents special difficulties. Great pains are taken to show the pupils that in order to pronounce English easily the German mouth must be held in an altered position. The converse of this, if applied to the teaching of German in our country, would greatly lessen the trials of beginners.

§ 34. *Mathematics.*—Here the first three years are devoted to elementary instruction, while the scientific study of the subject begins in class IIIb. "Anschauungsunterricht," or teaching through the pupil's own observation, is practised to a far greater extent than in English schools, it is, in fact, employed wherever it is possible. The general aim of mathematical teaching is thus described in the "Verordnungsblatt of July 2, 1887, concerning the curriculum of the Realgymnasium":—

(*a*) To present to the pupil the picture of a science.

(*b*) To enable him to demonstrate a truth by strict reasoning.

(*c*) To encourage him to apply his knowledge to the discovery of new truths.

In regard to (*c*) Algebra is held to be of the highest value, but

is never to be used merely to save the pupil the trouble of thinking out a problem for himself. On the contrary, it is desirable that in certain algebraical problems the pupil find the solution first by his own unaided reason, and then with the help of an equation.

The books in most general use are Bardey for Arithmetic and Algebra, and Treutlein-Henrici for Geometry. The use of uniform text books is, however, not enforced, as there is a greater variety of opinion among mathematical than among other teachers as to the most profitable method of teaching many points. As in the case of modern languages, the mathematical teaching is carried further in the Realgymnasium and Oberrealschule than in the Gymnasium, and furthest in the Oberrealschule. Both Realgymnasium and Oberrealschule offer a course of "Darstellender Unterricht" (advanced geometrical drawing), which figures in the curricula of but few Gymnasien, and only as a voluntary subject.

§ 35. *History.*—The teaching of this subject proceeds in all schools upon the same lines, though in the Gymnasium the chief stress is laid upon Greek and Roman ancient history, and in the Oberrealschule upon German history. In all schools, a review of the history of Baden is included in the profession of work. The greatest importance is attached to the use of maps and pictures. The overburdening of memory with unnecessary dates is carefully avoided.

§ 36. *Geography.*—Geographical teaching proceeds, as does historical, upon the basis of Anschauungsunterricht. It is held that the pupil will be most interested in the subject and best acquire a grasp of it if he is accustomed to draw for himself maps illustrating the courses of rivers, the position of towns, and so forth. The teaching begins as a rule with the district in which the school is situated, subsequently the Geography of Baden and Germany is treated in detail, and that of the other countries of Europe and other continents more or less fully according to the importance of their relations with Germany.

§ 37. The teaching of *Natural History* and *Botany* consists in training the pupil to develop his powers of observation, and to give a well-expressed account of what he has observed. That is to say, every fact must be learned from a study of Nature herself, for, to use the words of a Baden head master, the system has been given up under which a teacher might say "Here is a law, we shall see that to this law Nature must conform." It is found that pupils take little interest in their subject unless they see the animals or flowers about which the instruction is given. In the Oberrealschule, of Karlsruhe, there is a magnificent collection of materials for Anschauungsunterricht in Natural History and Botany, as well as in:

§ 38. *Chemistry and Physics*, which are taught upon the same general principle, *i.e.*, chiefly by means of experiment. The chemical and physical apparatus of the Realgymnasium of Karlsruhe are also admirable.

§ 39. *Home Work.*—While a reasonable amount of home preparation is required at the hands of the pupils, pains are taken not to make it distasteful or tedious to them. It is, for instance, the practice in the Gymnasien to let a class "read itself into" a new author before any portion of him is set for home preparation. Moreover, in the junior classes all difficulties in the coming lesson are explained in class, and it is only insisted upon that after their explanation a boy shall fix them in his mind at home.

§ 40. The progress of all classes is tested by a yearly examination which takes place at the end of the summer term, and is held in connection with the leaving examination—Abiturientenexamen or Reifeprüfung. The progress of the individual boys is checked by reports which are issued for all classes at Christmas, Easter, and at the end of the summer term, and for junior classes more frequently. The boys in all classes up to IIA. are placed in general order at the end of the school year, their places being decided by a comparison of the reports of their various masters. No order is made out in single subjects. Nothing resembling our system of marks is in force, neither are places taken in class. The reports are made out in the following manner:—

(*a*) Report on work in each subject—

1 = very good.
2 = good.
3 = satisfactory.
4 = unsatisfactory.
5 = bad.

From the special reports a general report is made out, the importance of each subject being estimated according to the number of hours per week which is given to it.

(*b*) Report on conduct—

1 = good.
2 = not quite satisfactory.
3 = unsatisfactory.

§ 41. It is upon these reports that the yearly promotions are decided. There are no terminal promotions. In order to obtain his promotion, a boy must be "satisfactory" in all subjects. The proportion of failures to obtain promotion seldom exceeds one-fifth of the number of boys in a class. The general

percentage of failures in all higher schools was in the years 1891–96:—

	Gymnasien.	Real-gymnasien.	Nine and Seven Class Realschulen.	Höhere Bürgerschulen.
1891	6 per cent.	8·3 per cent.	11·5 per cent.	8·3 per cent.
1892	7 ,,	6·0 ,,	9·0 ,,	7·8 ,,
1893	6·6 ,,	9·1 ,,	9·7 ,,	8·5 ,,
1894	7·4 ,,	9·2 ,,	11·2 ,,	9·9 ,,
1895	6·8 ,,	7·4 ,,	12·7 ,,	9·3 ,,
1896	7·3 ,,	7·4 ,,	10·6 ,,	9·3 ,,

If a boy is unsatisfactory in only one subject he is allowed a chance of passing a special examination in it at the end of the summer holidays, and, if successful, joins the higher class.

Boys who twice fail to pass out of a class must leave the school.

§ 42. The Statistics of the "leave" in the Baden Higher Schools are interesting. It is influenced mainly by (1) the Confirmation and First Communion of pupils, (2) the obtaining of the certificate exempting from one year of military service. The effect of 1 is represented by the fall in numbers after Classes IIIB. and IIIA., and is most apparent among the pupils of the Realschulen; and of 2 by the fall after Class IIB.

THE "LEAVE" IN THE BADEN HIGHER SCHOOLS.

No. of Boys in	Realschulen.			Realgymnasien.			Gymnasien.		
	1892.	1894.	1896.	1892.	1894.	1896.	1892.	1894.	1896.
Class IA.	6+19 in special classes.	6+20 in commercial class	22	31	29	36	360	346	390
Class IB.	—	13	43	47	48	58	391	375	407
Class IIA.	57	80	149	76	80	102	428	445	408
Class IIB.	223	378	408+9 in speci'l commercial class	193	202	178	575	562	510
Class IIIA.	434	528	692	282	242	219	506	510	477
Class IIIB.	734	785	930	336	273	259	636	562	571
Class IV.	855	1067	1109	419	306	261	549	561	551
Class V.	880	1161	1241	372	292	249	537	534	539
Class VI.	1068	1195	1277	390	341	280	566	565	564

§ 43. In Baden, as in other German States, a boy's future is more directly dependent upon his school career that in England. The right to obtain any post under Government, or to enter or qualify for a higher profession, is made conditional upon his passing successfully through certain classes of a Higher School.

Thus a very powerful stimulus to steady work is given, even apart from the dread of the full term of military service. Moreover, in Germany, where few boys are the sons of wealthy parents, and few have any ready-made position awaiting them when they leave school, the home supervision is in most cases strict. There is, therefore, no frequent necessity to resort to any but the mildest of the statutory punishments which provide for cases of idleness and misconduct.

The punishments are as follows:—

(*a*) Separation from the rest of the class during the lesson (employed only in the four lowest classes).

(*b*) Formal reproof either before the class or before a masters' meeting. (Such punishments are noted in the terminal reports sent to parents.)

(*c*) Detention under supervision, either in the school or in a master's house (employed chiefly in the four lowest classes).

(*d*) "Karzerarrest." This consists in solitary confinement during free hours in the school "Karzer" (a special room provided for the purpose). The length of the confinement may vary from two hours to three days. Any infliction of this punishment is noted both in the terminal and in the yearly report to the parents, and carries with it a fine of from fivepence to tenpence a day, payable to the school porter who attends to the "Karzer." The punishment is reserved for serious offences, such as visiting proscribed cafés or restaurants, &c.

(*e*) Expulsion, which is of two grades:

1. Simple expulsion, which does not disqualify for admission into another school.
2. Unqualified expulsion, which precludes admission into any other school of the country.

To the former kind of expulsion the assent of the Beirat must be obtained, to the latter that of the Oberschulrat. It will be noted that corporal punishment is not resorted to; neither is there any system of school fines.

§ 44. The Leaving Certificate Examination (Abiturientenexamen, or Reifeprüfung) is the final test of the work of such boys as pass through all nine classes of a Gymnasium, Realgymnasium, or Oberrealschule. Some account of this examination is here necessary for the purpose of further illustrating the method and standard of the work of the Higher Schools.

The examination is confined to boys who have been at least one year in Class Ia.

It is controlled by an examination commission, consisting of a member of the Oberschulrat as president, the head master of the school examined, and the other masters of the highest class.

The examination is set at the end of the school year, and upon the work done during that year. Loss of time through tedious revision of work is thus avoided. The Oberschulrat sets all papers, but is herein guided by the suggestions of the various head masters, who are required to furnish a list of suitable questions from which the Oberschulrat selects.

The examination is partly written, partly oral.

The items of the written work are these :—

Gymnasium.		Realgymnasium.		Oberrealschule.	
1	German Essay.	1	German Essay.	1	German Essay.
2	Latin Prose.	2	Latin Prose.	2	French Essay.
3	Latin Unseen Translation.	3	French Essay.	3	French Unseen Translation.
4	Greek Unseen Translation.	4	French Prose.	4	English Prose or Essay.
5	Mathematical Questions : — viz., two in Geometry, two in Arithmetic and Algebra.	5	English Prose.	5	Mathematical Questions : — viz., one in Algebra, one in Plane or Solid Geometry, one in Trigonometry, one in Synthetic or Analytic Geometry.
		6	Mathematical Questions :— viz., one in Algebra, one in Plane Geometry, one in Solid Geometry and Conic Sections, one in Plane Trigonometry.	6	Questions in Physics, Chemistry or Mineralogy.
		7	Two questions in Physics.		

N.B.—The use of dictionaries for the French and English Essays is permitted, as is that of certain tables for the work in Mathematics, Physics, and Chemistry.

Boys are orally examined in all languages professed, in History and German Literature, in Mathematics, and in Chemistry and Physics if professed. From this oral examination exemption may be granted on the ground of illness or of special merit. Its main purpose is to test further the powers of boys whose work during the year, or in the written examination, has not revealed satisfactory progress, or whose classwork and written examination have given very inconsistent results.

§ 45. The standard required in the various subjects is :—

In *Latin**—

(*a*) the correct translation of an unseen passage from a familiar author, such passage to contain no special

* The passage set for Unseen Translation in 1896 was Cic. Phil. 1 §§ 7–9 (inclusive).

difficulties either in respect of its language or of its subject-matter.

(*b*)* the translation of a passage from German into Latin to the avoidance of gross grammatical errors, and in the employment of a style free at least from gross germanisms. (The passage set to be of the difficulty of the pieces in the book used in the highest school class.)

In *Greek*†—

The correct interpretation of unseen passages from familiar authors, such passages to contain no rare words.

In *German*‡—

(*a*) An essay, which must show a logical arrangement and correct expression of ideas. (The same logical arrangement and correct expression of ideas are demanded of the pupil in oral examination.)

(*b*) A knowledge of the most important epochs in the history of the development of German literature, and an acquaintance with the chief works of German classical poetry.

In *French*—

(*a*) Grammatical accuracy, and a certain readiness in translating at sight from familiar authors.

(*b*) In the Realgymnasium and Oberrealschule, an essay or a prose devoid of gross germanisms and grammatical blunders.

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* The passage set for Latin Prose in 1896 was as follows: (the German is translated into English of corresponding difficulty)—

CAIUS SALLUSTIUS CRISPUS, TO THE EMPEROR TIBERIUS, GREETING!

"Thou askest me what I have learned concerning the man who gave himself out to be Agrippa; this I will tell thee, passing nothing over. Scarce had the story of Augustus' death been spread abroad, when a slave of Agrippa resolved to leave Rome, and journeying to Planasia to convey Agrippa thence to the German legions, in the hope that there, supported by Germanicus, he might persuade the troops to proclaim Agrippa Emperor. Arrived in the island, he learned that Agrippa was already dead, and thereupon determined himself to play the part. He got possession of Agrippa's last remains, hid himself for a season in the woods until his beard was grown, and meanwhile caused his friends to noise abroad that Agrippa lived yet, and would proceed to Rome to cast down Tiberius, and to set himself upon the throne. Thou knowest full well that the more foolish the story, the readier are men to receive it; and thus there soon were many, both slaves and free, who believed that this man was indeed Agrippa, and favoured his cause. And there is reason to fear that his following increases daily, and will at last imperil both thee and thy throne. Wherefore give me, I pray thee, full power to destroy this so-called Agrippa, and to free Rome from all fear. Farewell!"

† The passages set for unseen translation in 1896 were Plato, Euth., p. 283, A-p. 283 E. Thuc. VIII., §§ 1-2 (inclusive).

‡ The following are specimens of subjects given for the German essay in 1896:—

(α) The political background of "Hermann and Dorothea."
(β) How far is "Minna von Barnhelm," a German national comedy?
(γ) Estimate the political and literary importance of the "Seven years' War" for Prussia and Germany.

(*c*) In the Realgymnasium and Oberrealschule, a conversational command of the language, enabling the pupil to give the substance of passages already read in class, to describe familiar historical events, and to give connected answers to questions put to him in French.

In *English*—

As in French, allowance being made for the shorter time given to the subject.

In *History**—

(*a*) A general knowledge of Greek, Roman, and German history.

(*b*) A detailed knowlege of the history of the last three centuries, particularly of the history of Germany.

(*c*) An accompanying knowledge of chronological and geographical data.

In *Mathematics*—

(*a* An accurate, scientific knowledge of the whole subject as far as it is treated in the highest class.

(*b*) Readiness in all calculations that concern the dealings of everyday life.

In *Physics*—

(*a*) A general historical knowledge of the development of the science.

(*b*) Further, an acquaintance with the laws of equilibrium and motion, and the theory of heat, electricity, magnetism, sound, light.

In *Chemistry*—

(*a*) A knowledge, based on experiment, of the stoichiometric and property relations of the ordinary inorganic substances, and of the organic substances most important for domestic and commercial purposes.

(*b*) A knowledge of the simple minerals, enabling the pupil to describe their purely chemical compounds, their physical properties and chemical reactions.

§ 46. The Oberschulrat, in setting a paper, decides further the length of time to be allotted to it.

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* Cp. p. 349.

§ 47. The papers are done in a school class-room, and under the uninterrupted supervision of masters, whose duty it is to report any breach of examination rules to the head master. Cheating of any kind disqualifies a candidate.

§ 48. The papers are corrected by members of the school staff. Each paper receives, according to merit, the mark 1 = very good, 2 = good, 3 = pretty good, 4 = satisfactory, 5 = unsatisfactory, or 6 = bad.

Marks are given upon a similar system in the oral examination, after which the examination commission meets to discuss the final assessment of general merit, and the granting or withholding of certificates. A certificate is granted when the mark for general merit is: 1 = "very good," 2 = "good," 3 = "pretty good," or 4 = "satisfactory." But it is to be noted that a *bad* paper (*i.e.*, marked "6") in any of the more important subjects (*e.g.*, German, Latin, Greek, French, Mathematics, Physics) disqualifies. Apart from this, excellence in one paper may balance deficiency in another.

§ 49. Candidates who fail to obtain a certificate are allowed to present themselves once more for examination, but not before Easter of the following year. The number of those who fail is very small. In the years 1880–82 only four out of 340 were "ploughed." Nor in considering the general progress of work throughout the schools concerned would one expect a different result, for, as we have seen, it is rarely that more than one-fifth of any class fail to obtain their yearly promotion. In fact, the general work of the schools is so arranged that any boy of fair ability and industrious habits can pass through the various classes in regular yearly succession, and a boy who has thus reached the highest class can confidently look forward to obtaining his leaving certificate, if he continues to work steadily. Nor can the preparation necessary for the examination be regarded as an undue strain upon the energies of the candidates. Formerly, before the papers were set only upon the last year's work, some such strain may have been felt, and there was at any rate an excessive and wearisome amount of revision work. But that was remedied some years back, and wisely, as the wider knowledge of subsequent Abiturienten has since shown.

§ 50. The following are the privileges which have up to the present time been granted by the Government to the Higher Schools.*

The Oberrealschule confers upon pupils who

I. Obtain the leaving certificate:—

(*a*) *In the Imperial Service.*

Right of entry into the Post Office..... } (Higher
Right of entry into the Telegraph Service } Service).
Right to qualify for entry into the Shipbuilding and Machinebuilding Departments of the Imperial Navy.

* School Reports of 1896–7.

(*b*) *In the Civil Service of the Grand Duchy of Baden.*
Right to qualify as Mathematical or Science Master in Higher Schools (granted 14th January, 1896).
Right of entry into Railway Administration (Higher Service).
Right to qualify for entry into Mining Service.

II. Who pass out of Class IIA. :—
Right to qualify for Survey Department.
Qualification for Clerkship in Finance Department.
Right of entry as student into the Technische Hochschule.
Qualification for Clerkship in the Imperial Bank.

III. Who pass out of Class IIB. :—
Exemption from one of the two years of military service.
Right to qualify as Drawing Master in Higher Schools
Right to qualify as Teacher in Industrial Schools.

No recognition has as yet (August, 1897) been accorded to the following resolution of the Second Chamber, framed in April, 1894, and repeated in 1895 :—"That it may please the Government of the Grand Duchy to accord to the Oberrealschulen of Baden the privileges already granted to such schools by Prussia and by other German States."

§ 51. The Realgymnasium confers over and above the privileges conferred by the Oberrealschule :—

I. Upon pupils who obtain the leaving certificate :—
Right to qualify as Modern Language Master in a Higher School.
Direct entry into the Army as subaltern.

II. Upon pupils who pass through Class IB. :—
Admission to profession of Naval Paymaster.

III. Upon pupils who pass through Class IIA. :—
Admission to further Army Examination.
Right to study Dentistry.

IV. Upon pupils who pass through Class IIB. :—
Right to qualify as Chemist.

§ 52. The Gymnasium confers all privileges conferred by the Realgymnasium, and also in its leaving certificate holds the key to the University studies of Law, Medicine, Theology, Classics, and Political Economy.

A supplementary examination in Latin, Greek, and Ancient History may be passed by Realgymnasiasten who thereby

acquire the full privileges attaching to a leaving certificate of the Gymnasium, and a similar arrangement holds good as between the Realgymnasium and the Oberrealschule.*

§ 53. The uneven distribution of privileges largely accounts, first, for the disparity of the numbers in the highest classes of the different schools (v. p. 26, Table), and secondly, for the difference of the social standing of their pupils. With regard to the latter of these points, a comparison of the last school-lists issued by the Gymnasium and Oberrealschule of Karlsruhe shows in that of the former school forty-one names with the prefix "von," as against none in that of the latter. The former point is further illustrated by the statistical table here appended, which also shows roughly the proportion in which the boys of the Baden schools are subsequently distributed over the various professions open to them.

IN 1896

OF 378 BOYS WHO PASSED SUCCESSFULLY OUT OF THE

	Gymnasien.	Realgymnasien.	Oberrealschule.	Total in 1896.	Total in 1893.	Total in 1891.
There desired to become:						
Students of Theology:						
Roman Catholic	61	—	—	72	97	94
Evangelistic	10	—	—			
Jewish	1	—	—			
Students of Law	87	3	—	90	86	54
Students of Political Economy and Finance	9	2	—	11	15	18
Students of Medicine ...	47	—	—	47	38	52
Students of Languages:						
Ancient	5	—	—	20	13	24
Modern	1	3	—			
Uncertain	11	—	—			
Students of Mathematics and Science	11	3	1	15	10	10
Students of Forestry ...	11	3	—	14	12	13
Students of Engineering ...	26	15	6	47	25	14
Students of Architecture ...	—	—	—	—	4	—
Students of Chemistry ...	3	3	1	7	7	2
Post Office Officials	13	2	6	21	16	18
Railway Officials	4	2	—	6	2	3
Tradesmen	5	—	—	5	1	7
Officers in the Army... ...	16	6	—	22	23	17
Professed other Objects ...	1	—	—	1	6	11
Undecided	—	—	—	—	9	—
Total	322	42	14	378	364	337

It will be seen from this table that considerably more than half of the boys who complete a nine years' school-course subsequently study Theology, Law, Political Economy, or Medicine, to none of which studies the leaving certificate of either Realgymnasium or Oberrealschule admits.

* Hence the formation of the Latin classes of the Oberrealschule of Karlsruhe, mentioned on page 336.

§ 54. The physical training of the boys is provided for in all schools by a course of gymnastics, which in each class occupies two school-hours per week. Moreover, the game of football (Association) has been started in some parts of Baden, chiefly by English residents, and schoolboys may become members of a football club.

As closely connected with their physical training must be considered the "out-of-school" control to which the boys are subjected. As is most natural where the energies of the older pupils are turned into no better channel, there is always a tendency to ape what is coarser in the manners of University students, more especially, of course, in larger or University towns That is to say, that occasionally school "companies" and "beer-tables" are formed in imitation of the student fighting-corps and drinking societies. Special school legislation on such matters has been found necessary in Baden, as throughout Germany. Only the members of Class I. are allowed to enter either cafés or beer-houses, except in the company of their parents or other responsible persons. No schoolboy may visit any café or beer-house beyond a few of undoubted respectability, which are specified by the head master. No such house may be visited in the morning, nor may any visit be protracted later than 11 p.m. Hosts who encourage illicit visits, and boys who pay them may incur—the former, among other penalties, a fine of £1, the latter the punishment of "Karzer." Moreover, any excess committed in an authorised house, or any evidence of a loose or vulgar tone among the upper boys is sufficient to cause the permission to visit cafés and beer-houses to be taken away altogether. The entire efficacy of these rules and regulations may be doubted; the difficulty of enforcing them without an energetic school system of proctors and bulldogs must be clear to anyone who has lived in a German town. To check the formation of school "companies," the Oberschulrat found it necessary, in 1881, to issue stringent regulations, the necessity for which is still present. It may be remarked here that smoking in the streets is strictly forbidden to all pupils.

§ 55. The school fees charged in the Higher Schools are, in the Gymnasien:—

(*a*) in Classes VI., V., IV., £3 15*s.*
(*b*) „ III., II., I., £4 4*s.*
} + 6*s.* entrance money.

In the Realgymnasien and Realschulen, of varying amount, *e.g.*

In the Realgymnasium, of Karlsruhe, £3.
In the Oberrealschule, £2 2*s.* + 15*s.* for boys who use the Laboratory.

A remission of school fees is granted in the case of certain boys. The conditions attached to such remission are (*a*) the parents must make an application to the head master; (*b*) they must show that their application is justified by their pecuniary

circumstances; (c) the boys must bear a good character and be up to the average standard of their class. The head master lays such applications before the Oberschulrat, whose decision then follows generally in accordance with his recommendations.

§ 56. Entrance Scholarships are unknown, and prizes are few; the former are but little necessary where individual schools do not compete with each other, for the latter the privileges gained by passing out of the various classes are a sufficient substitute, and, moreover, render unnecessary our tedious system of marks.

§ 57. Every Higher School is inspected once in two years by a member of the Oberschulrat. Moreover, members of the Beirat of a school may attend the teaching in any of its classes. Other visitors are only admitted by the special permission of the head master, which is, however, readily granted.

§ 58. At the head of each Higher School is a head master (Direktor, Rektor or Vorstand), who, in the management of his school, exercises the same direct control as an English head master. He is appointed by the Oberschulrat. As a qualification for appointment is required, besides long practical experience of school work and organising power, the capability of taking the highest form in its most important subjects (*e.g.*, in the Gymnasien, in Latin and Greek).

§ 59. The head master is supported by a teaching staff consisting of Professoren, Lehramtspraktikanten, Reallehrer, and Religionslehrer.

The Professoren are masters who have enjoyed an University training, and have been officially appointed in a Higher School.

The Lehramtspraktikanten are masters who have enjoyed an University training, and are teaching in a Higher School, but are waiting for official appointment.

The Reallehrer are elementary schoolmasters who have not enjoyed a University training, but who are sometimes, nevertheless, employed in Higher Schools, chiefly as teachers of elementary subjects.

The Religionslehrer are appointed by the Oberschulrat on the recommendation of the ecclesiastical authorities, and include the teachers of religion according to the various creeds professed among the pupils. Of these is only required that they shall have studied Theology, but they may also qualify as teachers of other subjects, and thus obtain appointment as Professors. The number of those who adopt this latter course is on the increase.

§ 60. All masters who have been definitely appointed as such are State servants, enjoying the privileges and subject to the regulations of the "Law* concerning the State servants of Baden and the adjustment of their salaries."

The salary of a head master is £275, rising every three years by

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* Badisches Beamtengesetz und Gehaltsordnung.

£25, and carrying with it either free lodging or a lodging allowance of £31, £20 10*s.*, £16 10*s.*, or £12 10*s.*, according to local house value.

The minimum salary of a professor is £100, with lodging allowance as in the case of head masters. The professor's salary rises by £25 at the end of two years of service, and £25 after every subsequent three years. Thus he reaches the maximum salary of £250 in seventeen years.

The Lehramtspraktikant receives a salary of from £60 to £80.

The salary of the Reallehrer starts at £90 or £95. This salary rises by £12 10*s.* after two years of service, and then by £15 after every further three years to a maximum of £185 to £190. It carries with it a lodging allowance varying from £9 to £24.

The Religionslehrer are paid by the schools which they visit; but a school is not compelled to engage a Religionslehrer of a creed professed by less than twenty-five of its pupils; the responsibility of providing the requisite religious instruction for a smaller number rests with the Church concerned.

§ 61. The distribution of salaries among the members of the staff of a Higher School may be further illustrated by the following tables:—

I. SALARIES OF MASTERS HOLDING APPOINTMENTS AS STATE SERVANTS.

	Realgymnasium of Karlsruhe, 1897.							Oberrealschule of Karlsruhe, 1897.						
	Salary.			Lodging Allowance.				Salary.			Lodging Allowance.			
A. Direktor ...	£275 + £20			£ 31	s. 0	d. 0		A. Direktor...	£275 + £20			£ 31	s. 0	d. 0
B. Professors—	£	s.	d.					B. Professors	£	s.	d.			
1.....	238	10	0	31	0	0		1.....	203	10	0	31	0	0
2.....	212	0	0	31	0	0		2.....	197	0	0	31	0	0
3.....	203	10	0	31	0	0		3.....	160	0	0	31	0	0
4.....	153	10	0	31	0	0		4.....	148	10	0	31	0	0
5.....	153	10	0	31	0	0		5.....	148	10	0	31	0	0
6.....	140	0	0	31	0	0		6.....	130	0	0	31	0	0
7.....	115	0	0	31	0	0		7.....	100	0	0	31	0	0
8.....	110	0	0	31	0	0		8.....	100	0	0	31	0	0
9.....	105	0	0	31	0	0								
10.....	100	0	0	31	0	0		C. Reallehrer						
11.....	100	0	0	31	0	0		1.....	188	10	0	24	0	0
12.....	100	0	0	31	0	0		2.....	153	10	0	17	10	0
								3.....	152	0	0	17	10	0
C. Reallehrer—								4.....	135	0	0	17	10	0
1.....	172	0	0	24	0	0		5.....	135	0	0	17	10	0
2.....	155	0	0	24	0	0		6.....	128	10	0	17	10	0
3.....	157	0	0	17	10	0		7.....	122	10	0	17	10	0
4.....	123	10	0	17	10	0								
5.....	116	10	0	17	10	0		D. Lehramts-praktikant	60	0	0			
Total.....	£2,750	0	0	£503	10	0		Total	£2,557	10	0	£408	0	0

II. SALARIES OF MASTERS AND TEACHERS OTHER THAN STATE SERVANTS.

REALGYMNASIUM.		OBERREALSCHULE.	
	Salary. £		Salary. £
Lehramtspraktikanten		Lehramtspraktikanten	
1 ,, ...	80	1 ,, ...	75
2 ,, ...	80	2 ,, ...	70
3 ,, ...	75	3 ,, ...	60
4 ,, ...	70	4 ,, ...	60
5 ,, ...	60	5 Probationer (elementary subjects)	70
		6 Probationer (drawing).....	55
Total	£365	Total	£390

Teachers of religion and teachers of any extra subjects (*e.g.*, of Latin and Italian in the Oberrealschule) are paid at the rate of £5 per hour per annum.

§ 62. Every master, whose appointment has been officially recognised, is entitled after ten years of service to a pension amounting to thirty per cent. of his salary and lodging allowance. This percentage increases by one and a half after every further year of service, so that, after forty years from the date of his appointment, a master can retire upon the maximum pension of seventy-five per cent. of his then salary. The year of military service is counted as one of the ten years qualifying for a pension.

The widows and unmarried children of masters are also entitled to pensions, the children up to the age of eighteen. The widow's pension amounts to thirty per cent. of the husband's salary, that of each child to two-tenths of the widow's pension (two-fifths in the case of an orphan). All masters are compelled to pay a yearly contribution of three per cent. of their salaries into the "Widow's Fund."

After his fifth, or in special cases after his seventh, year of service, a master's appointment is considered irrevocable—that is to say, he cannot be dismissed except on the ground of misconduct or neglect of duty.

§ 63. A master who in any way neglects his duty may be, according to the gravity of his offence: (1) cautioned; (2) cautioned and fined in a sum of not more than £10; (3) fined in the amount of not more than one-third of a year's income, or permanently deprived of not more than one-fifth of his salary, and transferred to another school of equal or of lower standing; (4) dismissed and deprived of his claim to pension and other privileges. Such punishments are not inflicted except after a careful inquiry conducted by the educational authorities.

A master may, when circumstances require it, be transferred from one school to another quite apart from any question of punishment. In this case he is ensured against loss of salary.

A master is liable to be requested to retire (*a*) when he is

sixty-six years old, and his work is impaired by age; (*b*) when on account of physical or mental weakness he cannot perform his duties; (*c*) when illness has kept him at least one year from his duties. (He may in this case be subsequently re-instated.) Such enforced retirement of course does not entail loss of pension.

§ 64. The regulations for the previous training of masters of Higher Schools have experienced many alterations. Originally candidates for masterships were required to pass only one examination, and according to their success were considered qualified to give instruction in all or some of the chief subjects taught in the schools. They were required to have spent at least three years previous to this examination at an University, and at the University of Heidelberg (as later in Freiburg and Karlsruhe) was provided an opportunity of attending lectures on pedagogy, and obtaining some practical experience of teaching. Then in 1867 it was decreed that, in future, masters should pass (*a*) a qualifying examination in theoretical and scientific knowledge, and (*b*) a further examination testing practical teaching ability. The further examination was to be passed after the second year of service in a Higher School. Masters must, moreover, have been for four terms members of a training college, though in the case of the mathematical and science masters, the scarcity of appropriate training colleges partly frustrated this regulation. And as the classical and mathematical and science masters were thus divided, so there were formed out of the qualifying examination two examinations—one in classics, and one in mathematics and science. In 1873, a third examination was added to these two alternatives; in it was required a knowledge of classics sufficient for a teacher of a middle form (IIIB., IIIA.), and a general knowledge of German, French, and English or History. In 1873 too, the further examination was abolished, but a year of voluntary and probationary service was required of each master. In 1889, the educational authorities were induced to adopt in the main the Prussian regulations concerning the previous training of masters. They adopted them in the hope that, if uniformity of training existed between the two States, masters trained in Baden might obtain posts in Prussia. The hope was a vain one, for it is doubtful if an instance could be found of a master who has left Baden to take an appointment in Prussia. Worse than this, the Prussian regulations are not found to bear good fruit on Baden soil. The training college no longer forms part of the compulsory training of masters. The qualifying examination confers certificates of two grades. The higher grade certificate (Prussian Oberlehrerzeugniss) shews that the candidate has passed in two special subjects for higher classes; and in two secondary subjects for middle classes, or in a third special subject for higher classes. The lower grade certificate (Prussian Lehrerzeugniss) can be gained by those who profess two special subjects for middle classes, one secondary subject for middle classes, and one secondary subject for lower classes. The candidate has an almost entirely free choice of subjects. So that now while all masters are not qualified to take

equally high work, and some have passed a far severer test of intellectual attainments than others, all are recognised by the State as equal in respect of salary and privileges. And a candidate may pass his qualifying examination in the most unpractical combination of subjects, and yet claim appointment. The incongruousness of these circumstances had (we may presume) already, in 1893, become apparent to the central authorities, for in that year we find the Government advising teachers of German and History to combine modern languages with those subjects, emphasising the necessity of demanding a knowledge of science from mathematical masters and *vice versâ*, and laying stress upon the value of the training college as a prelude to practical work.

§ 65. Nevertheless, in the last Conference of Head Masters of Baden Schools held towards the end of 1896, the complaint is still loud that the choice of subjects for the qualifying examination is limited merely by advice and not by ordinance of government, and that *it is hard to make use of some masters who have passed the examination.* Moreover the two grades of certificate are condemned as unpractical.

Two plans of reform were suggested at the Conference:

(*a*) That an examination in special subjects should be held in February or March; that successful candidates should pass the following summer at the Hochschule of Freiburg, Karlsruhe, or Heidelberg, and there hear lectures and discussions on pedagogy, attend the teaching of classes in Higher Schools, and make some private practical experiments in teaching; that they should then be admitted in the beginning of winter to a second examination in general knowledge and pedagogy, and, having passed this, should be appointed as probationers in a Higher School; that such probationers as proved successful under the guidance of the head masters and masters under whose care they had been placed, should then be recommended for an independent post in the following summer.

(*b*) That after the first examination a whole year should be spent at one of the three Hochschulen in hearing the aforesaid lectures and discussions on pedagogy, attending classes of Higher Schools, and making practical experiments in teaching; that during this year candidates should act as voluntary masters in a Higher School of Heidelberg, Karlsruhe, or Freiburg; that at the end of the year they should pass the second examination, and become qualified for an independent post.

Whether one or the other of these two plans, or a combination of both, will be adopted is uncertain, but we may safely expect that the Prussian regulations will not remain in force. They have been fairly tried and found wanting, and the Education Department of Baden would not be acting up to its traditions if it retained them.

A further fact, not without importance, can be read out of the above-mentioned plans of reform. A desire is expressed in them to ensure preliminary pedagogical knowledge and practical experience in the case of newly appointed masters. Dr. E. von Sallwürk*, writing in 1890, accuses the Higher Schools of assuming an apathetic attitude towards all such matters. It would seem that his admonitions have borne fruit. Opportunity for gaining some preliminary knowledge of pedagogy, both practical and theoretical, has been afforded at Heidelberg since the time of Hermann Köchly (c. 1864). And it has long been the wish of the Education Department to make the acquiring of such knowledge compulsory for all Higher School masters. In 1892, indeed, the rough draft of a resolution to this effect was printed, in order to be laid before the Grand Duke, while the University of Heidelberg included in its estimates an item to cover the additional cost of the undertaking. But it was objected that those to whom the Heidelberg lectures were open were still students, and that the lectures, if made compulsory, would interfere with their scientific studies. At present, all voluntary masters serving in Heidelberg, Karlsruhe, or Freiburg (to Karlsruhe and Freiburg the Heidelberg system has for some years been extended) are obliged to attend the courses of lectures and practical work there provided. Now, there is a prospect of all masters being sent during their year of voluntary service to one of these three towns.

§ 66. With regard to their hours of work, the Higher School masters of Baden are better off than their English colleagues. The head master of any except quite small schools is required to teach during 12–14 hours per week, the professors during 18–20 hours, the teachers of elementary subjects during 24–26 hours. In schools where the classes are very small, an additional six hours of teaching may be required of the head master, and of the other masters an additional four hours.

The teaching duties of the professors, which, in all except smaller schools, occupy less than four hours a day, will no doubt appear extravagantly light to some English head masters. In reality, the educational authorities have so arranged them after careful calculation and from motives of a wise economy. Their object is to obtain from each master the best quality of work during the greatest number of years. They believe that the experienced master is the most efficient, and they wish to avoid a large pension list. They hold that with shorter hours a master can put his full energy into his teaching, and that better results may be required of him. Thus, too, a master can teach a larger class,† and if no actual saving is hereby effected in the number of masters required, an important saving of leisure time for each

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* "Das Staatsseminar für Paedagogik," p. 12.

† The average numbers of boys in all classes of Higher Schools are ; in the Gymnasien and Progymnasien, 26-27 ; in the Realgymnasien and Realprogymnasien, 28-29 ; in the Oberrealschule and seven-class Realschulen, 35 ; in the smaller schools, 22.

master is effected.* In this regard many assistant masters in our secondary schools are badly off in comparison with the assistant masters in Baden. But in Baden it is considered essential that a due amount of leisure time be secured to all assistant masters. For it is regarded as the German master's duty that he shall not lay aside all scientific study with the student's cap or on the acquisition of his teaching diploma, but that he shall continually strive to render himself fitter for the profession he has entered. The importance attached in Baden to the fulfilment of this duty is clearly shown by the material encouragement given to fulfil it. The Baden professor has opportunities which are nowhere else so freely afforded of completing the education which he began at school and continued at college. If he desires to study modern languages, he can frequently obtain a stipend (Stipendium) from Government to enable him to study them where they are spoken. Such a stipend amounts to £25 to £30 for a six weeks' visit to England, and £20 to £25 for a similar visit to France. For classical scholars there are arranged tours (Studienreisen) through Italy, Sicily, Greece, and Asia Minor. Of such tours, one took place in 1889 (from March 4th to April 27th), another in 1892 (from March 10th to May 27th), and a third in 1896 (from February 27th to May 3rd). The route of the first was: Florence, Rome, Naples, Pompeii; of the second: Greece, Asia Minor, Constantinople; of the third: Rome, Naples, Pompeii, Tarentum, Cannæ, Cotrone, Locri, Regium, Syracuse, Palermo, Segesta, Tunis, Sardinia. Every master was required to contribute towards his expenses: £15 for the first tour, £18 for the second, and £18 for the third. These tours are conducted by University professors. Substitutes are provided for masters during their absence on such tours.

§ 67. The so-called "grace" term of Clifton College corresponds to some degree with the Baden system of Studienreisen and Stipendien. But, apart from such sporadic efforts, little or nothing is done in England to encourage masters to continue their University studies. That the teaching in our Higher Schools suffers accordingly is certain. But in the absence of organisation in our schools there is no remedy. The necessary money would have to come out of the school funds, and in many cases it would not be forthcoming. Moreover, our masters are unevenly paid in our various schools. The result of granting stipends might be in some cases that the master would use the qualifications gained at the expense of one school in order to secure a post at another. But beyond all this, it is very doubtful whether our headmasters as a body have yet realised the necessity of securing capable teachers for all classes and in all subjects. The teaching of modern languages may be taken as a case in point. The beginners (the most important stage) are often in the hands of men who may be admirable teachers, but know nothing of the subject, and the senior boys in those of foreigners who, indeed, know the

* *I.e.*, in a school week averaging 30 hours per class, 15 masters working 20 hours teach ten classes of 30 boys (300 boys), where 15 masters working 30 hours teach 15 classes of 20 boys (300 boys).

subject, but may not be admirable as teachers. It is astonishing that, among our schools, traces are still to be found of that most pernicious theory, that any man who can teach any one subject to a junior class can teach all, even those of which he has no previous knowledge; that he can learn quicker than his pupils, and can therefore teach them by "keeping ahead" in the work to be done!

§ 68. To those who argue that idleness is bred of assured positions the following table must be the apology of the masters of Baden. It is taken at random from the lists of scientific treatises, which are issued by the Higher Schools in connection with the head master's yearly report. Each school issues a treatise every two or three years, and each treatise is the work of a member of the staff:—

LIST OF 1888–89.

Gymnasium of Baden	Essays on Dante's Divine Comedy.
Gymnasium of Bruchsal	Animal Psychology.
Gymnasium of Karlsruhe	Concerning the MSS. of L. Junius Moderatus Columella (de re rustica) with a critical edition of Book X.
Gymnasium of Constance	The Demegorics of Demosthenes.
Gymnasium of Lörrach	Quæstionum Plautianarum et Terentiarum, pars I. De verbi "posse" formis dissolutis.
Gymnasium of Mannheim	Roman antiquities in the Mannheim collections.
Gymnasium of Offenburg	Criticism of the historical authorities of the Middle Ages.
Gymnasium of Pforzheim	Position of Max Piccolomini in Wallenstein.
Gymnasium of Tauberbischofsheim	De casuum usu Varroniano.
Gymnasium of Wertheim	The proper treatment of Shakespeare's Julius Cæsar in school classes.
Progymnasium of Donaueschingen	Discoveries of Roman coins in the Grand Duchy of Baden.
Realgymnasium of Mannheim	The life of S. Wilhelm.
Realschule of Karlsruhe	Catalogue of Library.
Höhere Bürgerschule of Kenzingen	(*a*) Scholia Juvenalia Inedita, I. (*b*) Kenzingen in the Peasant War.

Such lists prove of the leisure time of Baden masters, what the results of their teaching prove of their hours in school, that it is well spent. There is admirable work in many of the treatises issued. They may, moreover, contain valuable hints as to the teaching of various subjects, and give the experience of one master to the rest, and, generally speaking, they promote a friendly rivalry which draws closer the bond by which all Higher Schoolmasters are united. Further, they give some gauge of a man's ability to which reference might possibly be made upon the question of later appointments.

§ 69. Of great importance are the various conferences of masters which form part of the routine of the school organisation. The conferences are of four kinds:—

(*a.*) Concerning individual schools:—

1. The class conference, a monthly meeting of all masters engaged in the teaching of a class, at which the general progress of the class is discussed.

2. The set-masters' conference, a half-yearly meeting of all masters engaged in teaching the same subject, at which such subject is "schemed" for the various classes.

3. The general conference, a terminal meeting of the whole teaching staff, presided over by the head master. At these meetings such ordinances of the Oberschulrat are made known to the staff, as have not already been communicated to them by circular. Then follows a discussion upon any questions that may have arisen concerning method of teaching, discipline, the choice or retention of school books, and so forth. Decisions are taken by vote, and, if they cannot otherwise be arrived at, a casting vote may be given by the headmaster.

(*b.*) Concerning all schools :—

The Head Masters' Conference, a compulsory meeting of heads of schools.

There have been six such meetings held in Baden, at intervals of about three years. The last was summoned on November 23, 1896.

At these meetings are present the Oberschulrat, and the head masters of all Gymnasien, Progymnasien, Realgymnasien, Oberrealschulen, and seven-class Realschulen.

§ 70. It may not be amiss to emphasise two points in connection with the masters' conferences. They show us that in the schools of Baden, head master and colleagues work together. Not only does the professor's voice carry with it due weight in the general meetings of individual schools. For the head masters' meetings suggestions are collected from the various school staffs, and from these are framed questions for discussion. Therefore, the recommendations made thereafter to the Oberschulrat bear with them in some sense the weight of the opinion of the whole teaching body, while in comparison with those of Baden the meetings of our head masters are as a council of the Epicurean gods.

Secondly, they show us that the central educational authorities are well in touch with the head masters they appoint. In the Conference of 1896, we find that much time was spent in discussing the question: "How far does the Ministerial Ordinance of 1869 call for alteration?" That is to say, that just as the headmaster invites the criticism of his staff upon matters concerning the administration of individual schools, so does Government invite the criticism of the headmasters upon the regulations of general school administration. And the criticism of head masters is based on the suggestions of the whole body of teachers. Herein we see the unity between the effective and the controlling body which has characterised and accompanied the rapid development of Baden's Higher Schools.

§ 71. Who were in earlier times the practical pedagogues of Baden? "They were," says Dr. von Sallwürk,* "for the lower

* Das Staatsseminar für Paedagogik."

service still, even in the enlightened times of the great Frederick, the village gooseherd or a discharged soldier; for the higher service, up to and within our own times, the young theologian who had to make a living till he obtained a benefice from his Church. The master by profession is a phenomenon of our century." And now, in 1890, "I myself," says the same writer, "consider our Gymnasien and Realschulen as the best schools of their kind now in existence, and I am convinced that many of their masters would grace an University chair." What was true in 1890 is still more true in 1897. The causes of this rapid change are in part the reforms dealt with in the first pages of this report. But there is a cause that lies deeper, and which is likely to secure for the schools of Baden a future progress greater than that which has been made in the past. Together with the sense of the advantage resulting from the first great reforms, there has grown up and become confirmed, not only in the teaching body but in the whole community, the realisation of the importance and necessity of good education, good schools, and good masters. This feeling is fostered by the central authorities, recognised by the Government, and shared by the Grand Duke. And thus it is that we find citizens and townships proud of the schools which they aid in building and staffing for the education of their children, and in the control of which they are not unconsulted; a Higher School Council, relying confidently on the head masters it appoints; head masters striving with assistant masters in the interests and for the just claims of the whole body of teachers; and assistant masters entering a profession where their position is assured, and where they can feel that they are working not only in support of one man, not merely for the interests of one school, but, further, for the progress of a great educational system. There is no intention in this report of disguising defects still to be noticed in the teachers of Baden Higher Schools. Dr. von Sallwürk told us in 1890 that their pedagogical training was sadly deficient, and in 1897 he is not much better satisfied with them. And it is probable that Baden headmasters would admit that the unevenness of their staffs, both in social qualifications and in practical teaching ability, is still one of the weakest points in the educational system of the country. But the remedy has been discovered; it is only the application that is somewhat slow. It is realised in Baden that, if the best men are to be secured for the schoolmaster's profession, that profession must be given a social and pecuniary standing equal to that of the other higher professions, and that it is useless to demand great sacrifices of a man about to enter a calling, unless it offer him some fair prospect of reward.* And it is not hard to prophesy

* The following facts may help to illustrate this statement:—

In 1884, the Minister of Education admitted in the session of the Landtag, that there was not enough money applied to the payment of Higher School masters of University training.

In the same year, it was remarked at the meeting of the Ständekammer of Baden, that the masters as State officials were worse treated than the lower orders of judges (*e.g.*, Amtsrichter, Amtsvorstände). "What masters want," says the South-west German School Journal, commenting upon

from the latest signs of the times that Dr. von Sallwürk and his co-reformers will at no far distant date be able to point to a body of masters of more consistent excellence, fashioned of better material and according to more strictly pedagogical method.

§ 72. As has already been stated, the time-table and curriculum of the Höhere Mädchenschulen are based on those of Realschulen, and their administration is so similar in its details to that of other Higher Schools that it would be superfluous to touch upon it here at any great length. The teaching staff of a Höhere Mädchenschule consists of a head-master, supported by assistant masters and mistresses, who are paid at somewhat lower rates than in the schools for boys. This point, as well as the proportion

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this, "is a quicker rate of progression towards the income that ensures a decent livelihood, and a reasonable prospect of obtaining the maximum salary. . . Then will disappear the necessity of the side pursuits with which the professors are so often reproached, and which indeed have not tended to increase the respect felt for the teaching body."

In February, 1885, there were Lehramtspraktikanten who had passed their qualifying examination in 1879, and had not yet become professors, and five years as a Lehramtspraktikant could be reckoned upon. The average salary of professors and head masters of Higher Schools was £155. Only three professors had in 30 years' service reached the maximum salary, whereas the lower orders of Judges, the Amtsrichter and Amtsvorstände, reached their maximum salaries of £225 and £260 respectively in 16 or 17 years.

In 1885, then, a petition was drawn up to be presented to Government, praying among other things, for (1) settlement by law of the question of Lehramtspraktikanten and their appointment to professorships; (2) settlement by law of the question of salary in such a way as to make the position of the Higher School professor entirely equal with that of the Amtsrichter. This petition was signed by all head masters save five, and by all professors save five. But it failed, according to the South-west German School Journal, because of the preponderance of legal representatives in the ministry of Baden. "Nowhere do the lawyers appear to hold so many of the highest official posts as in Baden."

In 1886, however, the average of the salaries of professors in Gymnasien, Realgymnasien, Realschulen and Höhere Bürgerschulen was slightly raised.

In 1890, the principle was laid down in the Second Chamber upon the side of the Government that professors were regarded as of quite equal standing with law officials of University training.

In 1897 (on January 1), all professors appointed before 1895, received an increase of salary amounting to £25. Thereby the number of professors in receipt of the maximum salary was increased from 10 to 40. And, moreover, the claim of the professor to be put on an equality with the Amtsrichter was now practically recognised. Compare the following table:—

	Maximum salary in 1897.	Average Salary in 1897.	Average Salary before 1897.
	£ s.	£ s.	£ s.
Councillors of the Provincial Courts of Justice (Landgerichtsräte)	275 0	271 0	253 10
Inspectors of Finance (Finanzinspektoren)	250 0	216 10	200 0
High Foresters (Oberförster) ...	250 0	199 0	180 0
District Judges (Amtsrichter) ...	250 0	191 10	175 0
Professors	250 0	186 10	161 10

of masters to mistresses, may be illustrated by the following table, which deals with the Höhere Mädchenschule of Karlsruhe in 1897:—

	Masters.	Salary.	Lodging Allowance.	Mistresses.	Salary.	Lodging Allowance.
		£ s.	£ s.		£ s.	£ s.
A 1.	Head master ...	265 0	31 0	—	—	—
B	Professors ...	—	—	—	—	—
1.	... ...	213 10	31 0	1	82 10	17 10
2.	... ...	158 10	31 0	2	80 0	17 10
3.	... ...	140 0	31 0	3	80 0	17 10
C	Elementary Teachers ...	—	—	4	80 0	17 10
1.	... ...	190 0	24 0	5	70 0	17 10
2.	... ...	178 10	24 0	6	60 0	17 10
3.	... ...	173 10	17 10	7	60 0	17 10
4.	... ...	163 10	17 10	8 in needle-	80 0	17 10
5.	... ...	109 0	17 10	9 work	70 0	17 10
6.	... ...	90 0	17 10	—	—	—
D 1.	Gymnastic Master ...	122 10	17 10	—	—	—
	Total 10 + 1 ...	£2,063 10		9	£820	
		= £2,883 10s.				

In 1894 the total number of girls in the seven Höhere Mädchenschulen of Baden was 2,436. The total number of teachers was 97, of whom 21 were masters of University training, 28 masters who had not been to the Universities, and 48 mistresses. The average number of girls in a school class was 27.

§ 73. The object of the Höhere Mädchenschulen is not to educate girls as scholars, but rather to furnish them with that education which is in German called "bürgerlich," that is to say, to fit them for the place that they must hereafter fill in family life as daughters, wives, and mothers. Therefore the instruction is, above all things, practical. The luxuries of education for which there is a demand in England and America, enter in no way into the training of either boys or girls in Baden. And the German educationist, though he is not what a writer in the "Journal des Débats" lately called him, an "antiféministe farouche," is exceedingly shy of any changes that might possibly tend to develop the type which is now known among us as the "new woman." Any such changes he would regard as threatening the continuance of that patient and self-sacrificing race of German wives and mothers which forms the great strength of his country.

* The teaching in the Höhere Mädchenschulen is admirable, in modern languages quite striking, and in referring to this a word of special praise must be given to the mistresses, who in point of enthusiasm and enterprise need not fear comparison with the masters of the best boys' schools. It is satisfactory also to find in the Höhere Mädchenschulen a vigorous system of gymnastics,

* These remarks are based on visits of inspection made by the kind permission of Herr Direktor Löhlein to the Höhere Mädchenschule of Karlsruhe, which contains about a quarter of the total number of pupils in the Höhere Mädchenschulen of Baden.

by which it is sought to encourage that pursuit of physical exercises, the lack of which is no less apparent in German girls than in German boys.

§ 74. In consequence of the law passed by the German Reichstag in 1891 permitting women to study at the Universities, efforts have been made in several parts of Germany to found girls' schools to prepare for an University training. And in Baden, which is the home of educational experiment, one of the first, if not the first, of these schools has been founded. This is the Mädchengymnasium of Karlsruhe, whose object is to "open to our daughters the path to the entry upon University studies," and which must therefore first show whether the physical and mental powers of girls are equal to the scientific study and schooling hitherto supposed to be suited to boys alone. Supporters of the school maintain that even in Mathematics and Latin—the two hardest subjects—the girls have shown themselves quite equal to the boys. But the Mädchengymnasium does not flourish, and for these reasons: the parents who could afford to give their daughters its education as a luxury have no sympathy with the movement to which it belongs; and it has not yet been shown that the State is desirous of appointing women in the professions which it controls, and therefore the children of poorer parents are sent to the more practical Höhere Mädchenschule.*

§ 75. It is not the purpose of this report to enter into the history of the "Real" movement, but it is interesting to notice the position which Baden occupies with regard to that movement. It is a middle position between the States in which, as in Prussia, classical education has been almost overwhelmed by the wave of "realismus," and those which, like Alsace, have preferred to retain the old classical training. The movement has been strongly felt in Baden, as the following table shows:—

NUMBER OF BOYS IN HIGHER SCHOOLS.

School Year.	In Gymnasien and Progymnasien.	In Realgymnasien.	In Realschulen.	Total.
1882–83	4590 = 52·2%	2949 = 31·6%	1406 = 15·2%	9,305
1887–88	5262 = 47·7%	2565 = 23·2%	3212 = 29·1%	11,039
1888–89	5107 = 45·7%	2495 = 22·4%	3564 = 31·9%	11,166
1889–90	4759 = 43·8%	2394 = 22%	3724 = 34·2%	10,877
1890–91	4657 = 42·8%	2376 = 21·9%	3838 = 35·3%	10,871
1891–92	4548 = 41·1%	2146 = 19·4%	4372 = 39·5%	11,066
1892–93	4494 = 39·6%	2089 = 18·4%	4773 = 42%	11,356
1893–94	4460 = 38·8%	1813 = 15·7%	5233 = 45·5%	11,506
1994–95	4421 = 37.9%	1652 = 14·2%	5578 = 47·9%	11,651

* *Cf.* "Journal des Débats," Sept. 22, 1897. "On sera sans doute étonné que le nombre des jeunes filles qui profitent de la loi de 1891 soit si petit. C'est que l'on tolère bien que la femme apprenne la médecine ou le droit, on pousse jusqu'au bout l'étude des sciences ou des lettres; mais on persiste en Allemagne à lui refuser les grades qui consacrent ces travaux et permettent d'en recueillir le fruit."

§176. Here and there a Latin* school in some smaller town has been transformed into a Realschule, as Friedrich Gedike at the end of last century advocated that all such schools should be transformed. But there is as yet no sign in Baden that classical education is in any danger. There is full evidence on the other hand that there is a rapidly and widely increasing demand for secondary education, and the history of the last four or five years makes this most clearly manifest. Between 1893 and 1895 there was a movement made along the whole line of the smaller communities. The admirable example of the larger towns has been followed by no less than eleven of the smaller. Bühl, Gengenbach, Messkirch, Pfullendorf, Säckingen, Staufen, Wolfach, Kehl, Radolfzell, Stockbach, Triberg, now possess three Höhere Bürgerschulen and eight "extended" Elementary Schools with Höhere Bürgerschule divisions. And the education provided by these newer schools is almost entirely of a "real" or Latinless nature. Still, especially in the larger towns, the increase in the number of "real" pupils has been a net increase in the number of pupils in Higher Schools rather than a loss to the Latin Schools.

The numbers of the great schools of Karlsruhe during the last twenty years have been as follows:—

In the Year.	Gymnasium.	Realgymnasium.	Real / Oberreal } schule.
1876–77	423	442	—
1877–78	483	387	333
1878–79	562	391	343
1879–80	617	428	381
1880–81	642	435	419
1881–82	689	413	410
1882–83	704	414	480
1883–84	691	415	511
1884–85	675	474	547
1885–86	669	463	571
1886–87	665	463	623
1887–88	678	462	692
1888–89	689	476	741
1889–90	649	502	763
1890–91	654	506	791
1891–92	642	476	839
1892–93	623	475	885
1893–94	637	474	963
1894–95	660	474	992
1895–96	658	481	989
1896–97	643	*536	992

* With Reformgymnasium.

It can be seen from these figures that the rise in the numbers of the Realschulen has been accompanied by a rise—not indeed a proportionate rise—in those of the Latin schools. Indeed the school that had the largest number of entries for 1896–7 and also for the present school year 1897–8 was the Reformgymnasium.

* *E.g.*, that of Villingen, 1896–7.

The greatest authorities on education in Baden are agreed that the Realmovement will probably go yet further, but it should be noticed that in the most "real" of German educational systems (the Prussian) a reaction is already setting in, and that the rise of the Realschulen has not in the last three years been so much by leaps and bounds as formerly.

§ 77. In Prussia, Hesse, and other German States, not only have the Realschulen proved themselves stronger than the classical schools, but the Realmovement has left its mark deeply upon the teaching of the latter. Prussia, for instance, since the School Parliament which was convened in Berlin in 1890, has so modified the timetable of her Gymnasien as to imperil the efficacy of her classical teaching. Anhalt has done the same; Bavaria almost the same. Baden has had to make no similar concessions. And this is because as early as 1869 she made as it were a compromise with the spirit of the Realmovement, and ordained a due and fitting proportion between the various subjects taught in her Gymnasien. In this, as in other points, she has since served as a model to several other States.

Hours per week.	Latin.	Greek.	French.	All Languages	All subjects except Singing and Gymnastics.
In the Gymnasien of—					
Prussia (since 1891) ...	62 formerly 77	36	19	143	252
Bavaria (since 1891) ...	66 ,, 73	36	10	139	228
Würtemberg (since 1891)	81 ,, 90	40	18	161	263
Saxony (since 1891) ...	71-3 ,, 78	40-2	18	154-8	258-62
Saxe-Weimar (since 1893)	72 ,, 78	40	18	153	261
Anhalt (since 1892)....	62 ,, 77	36	19	144	253
Hamburg (since 1892)	69 ,, 74	36	(19 + 8) (Eng.)	153	258
Hesse (since 1893).....	68 ,, 74	36	23	154	265
Baden (since 1869).....	*72	36	20	150	261

* The number of hours given to Latin in the Gymnasien of Baden was 72 in 1837, and 73 from 1869 to 1883.

78. There appears to be room enough in Baden for both Latin and Latinless schools to flourish side by side. But there are reformers in the land who see a fatal weakness in this dual system. So widely, and from such an early stage, do the two classes of schools diverge in their teaching, that a boy once entered cannot be transferred from Realschule to Gymnasium or from Gymnasium to Realschule without considerable expenditure of labour, time, and money. Therefore, a parent must decide which type of education will best suit his son, before his son is* ten years old. Moreover, between the boys who learn Latin and those who do

* N.B.—A boy can be transferred from Realgymnasium to Gymnasium, and *vice versa*, up to, but not after, his third school year. He can hardly be transferred from Realschule to Gymnasium.

not there is a great gulf fixed, from their tenth year onwards, to the weakening of that feeling of fellowship and solidarity which ought to, and which must, exist between all classes of the German people. Thirdly (and this last argument is, perhaps, not least in the eyes of the reformer), to start the teaching of Latin before the teaching of French is to transgress two well-known laws of pedagogy: "from lighter to harder," and "from that which is near and concrete to that which is distant and abstract," for "the things and relations of the present and his own surroundings come more nearly within the comprehension of a nine-year-old boy than do the circumstances of ancient Greece and Rome." It was this last consideration that gave rise in 1878 to some preliminary experiments in the Realgymnasium of Altona, where the teaching of Latin was deferred till the third school year, and French was substituted for it in the two lowest classes. The success of these experiments, we are told, and also general considerations, induced the educationists of Frankfort in 1892 to rearrange the time-tables of two Realgymnasien and one Gymnasium upon similar "reform" lines. People had been busy in Baden as early as in Frankfort with schemes of "reform"; still it was held wiser to wait till the success of the Frankfort schools could be in some measure tested before imitating them.

In 1896 it was resolved to remodel the Realgymnasium of Karlsruhe into a Reformgymnasium with this time-table :—

	Common Basis.					Gymnasium.					Realgymnasium.				
	VI.	V.	IV.	U. III.	Ob. III.	U. II.	Ob. II.	U. I.	Ob. I.	Total.	U. II.	Ob. II.	U. I.	Ob. I.	Total.
Religion	2	2	2	2	2	2	2	2	2	18	2	2	2	2	18
German	6	5	4	3	3	3	3	3	3	33	3	3	3	3	33
French	6	6	6	3	3	2	2	2	2	32	3	3	2	2	34
English	—	—	—	—	—	—	—	—	—	—	6	5	4	4	19
Latin	—	—	—	10	10	8	8	8	8	52	6	5	5	5	41
Greek	—	—	—	—	—	8	8	8	8	32	—	—	—	—	—
History	—	—	2	2	2	2	2	3	3	16	2	2	3	3	16
Geography... ...	2	2	2	2	2	—	—	—	—	10	—	—	—	—	10
Natural Studies.	2	2	3	2	2	2	2	2	2	19	2	2	4	4	23
Mathematics ...	5	5	5	4	4	3	3	4	4	37	6	6	5	5	45
Geometrical Drawing... ...	—	—	—	—	—	—	—	—	—	—	—	2	2	2	6
Drawing	—	2	2	2	2	—	—	—	—	8	2	2	2	2	16
Writing	2	2	1	—	—	—	—	—	—	5	—	—	—	—	5
Gymnastics ...	2	2	2	2	2	2	2	2	2	18	2	2	2	2	18
	27	28	29	32	32	32	32	34	34	280	34	34	34	34	284

A prospectus issued to the parents of Karlsruhe in order to test the popularity of the reform movement, claimed for the new school these (among other) advantages :—

(1) The parent need not definitely choose a school for his son till he is thirteen years old, because the time-table of the Realgymnasium is for Classes VI., V., IV.

that of the Realschulen. He need not decide between Gymnasium and Realgymnasium till his son is fifteen years old, because Classes VI.–IIIA. of the Reformgymnasium have a common time-table.

(2) A boy leaving the Reformgymnasium from one of its middle classes (IIIB., IIIA.) has already received a training which is not a patchwork of valueless beginnings, but has put him well upon the way to entry into business or into the lower or middle branches of the State service. That is to say, he has been better grounded in French and in German, and has spent less time on Latin than if he had been at a Gymnasium or Realgymnasium.

(3) The substitution of French for Latin as the first foreign language to be taught, besides conforming to the pedagogical precept "From easier to harder," introduces a closer resemblance between the higher education of boys and girls, and thus draws closer the relations between school and home.

(4) The treatment of French from the lowest classes upwards as a living language (*i.e.*, the employment of the analytic method) awakens and sustains the lively interest of the pupil, and is a more natural, more profitable, and less tedious way of bringing him to a knowledge of the principles of grammar than is the present method of Latin teaching. The principles of grammar thus acquired render his first progress in Latin, when he subsequently begins it in Class IIIB, far more rapid. The "reformers" claim that this statement is borne out by the results obtained up to the present at Frankfort.

The general objects of the teaching of the Reformgymnasium, continues the prospectus, are those of the Gymnasium and Realgymnasium. But "the greater weight laid upon German and the prominence given to French teaching distinguish the Reformgymnasium as an educational institution resting upon a more modern basis, and in the sequence of its linguistic subjects it meets the demands and the urgent needs of the present time. But in its practice of ancient languages it recognises the necessity of linking the new with the old, and of a thorough grounding in history and literature."

It would be bold to prophesy concerning the future of the Reformgymnasium. Not even the "reformers" themselves can tell us what will be its influence upon classical training. Along with other schemes of reform, "it floats between earth and heaven" "es schwebt in der Luft," as Germans poetically express it. It has been the means of demonstrating some weaknesses of the present Higher School system. That is clear. But what of its own ultimate object?

Its prospectus leaves us in uncertainty. It is an institution upon a "more modern basis," and yet desires to compass the

ends of the present Gymnasien and Realgymnasien. Does it herald the approach of an "one school for all," such as Gesner advocated at the end of the last century? Or are the old classical schoolmen right in regarding it as a thing neither hot nor cold? We must look for an answer to the Frankfort schools after they have run a nine years' course.

Meanwhile we can learn this from the Reformgymnasium. It is a protest against the inequality of the privileges granted to the various types of Higher School, sanctioned by Government and endorsed by public opinion. For, in the first place, its leaving certificate "confers the same rights as do those of a Gymnasium and a Realgymnasium;" and secondly, in the first two years of its existence it has secured a far larger number of entries than the other nine-class schools of Karlsruhe. It points to a time not far distant when "Abiturienten" of *any* nine-class school will be allowed forthwith to study medicine, law, and even theology, whisper the "reformers." And when the time comes it will bring at least one solid advantage even to the Gymnasien, the riddance of a certain number of those who sit upon its benches more for the sake of the outward and material privilege, than of the inward grace of the classical training.*

D.—CONCLUSION.

§ 79. The Educational Authorities of Baden claim for their Higher Schools the first place among the Higher Schools of Germany, and the claim is strongly supported by outside opinion. Certainly no schools could appeal more strongly to the interest of the student of school systems, and none could afford him better opportunities for study, nor will there be found elsewhere a greater courtesy in welcoming foreign criticism, or a greater readiness to invite foreign inspection. Two facts must be mentioned as helping to explain the extreme rapidity and thoroughness with which the Educational Statesmen of Baden have applied reforms that have entirely revolutionised their Higher School system. In the first place the area placed under central control is of comparatively small extent, and thus has been avoided the unevenness of excellence which is said to exist among the schools of some large States. And, secondly, Baden is specially fortunate in the ruler, who for forty years has always been ready to aid the cause of education with clear judgment, and with a liberal hand.

§ 80. Enough has been said in this report to show that there is a marked contrast between our Higher Schools and those of

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* Dr. Wendt, writing in the South West German School Journal in 1889, says:—

"Classical education can never become really popular. In these days of superficial knowledge there are plenty of people who are ready to condemn the classical schools offhand—parents and friends of parents who have not felt themselves quite in their element while at these schools, or whose sons or their schoolfellows meet with a like experience."

Baden. It remains to lay further stress upon a few of the more salient features of Baden's system. This will serve the double purpose of pointing the contrast, and of letting us see ourselves more clearly as Baden sees us.

§ 81. In one point, and one only, will Baden schoolmen admit that we are superior:—viz., in our school games. These it is, though in a very modified form, that they desire to borrow from us, when they admit the desirability of combining what is best in their school system and in ours. Partly, no doubt, because the effect of the military training is seen to be excellent, partly perhaps through the example set by English residents, Baden schoolmasters and schoolboys are growing less satisfied with their regulation two hours per week of gymnastics. Certain educational authorities who have studied the games of our Public Schools, have expressed their envy of our physical development, and more lasting youthfulness of body and of mind. And indeed, Germans in general, lose far more than mere bodily strength and grace by their neglect of athletics. With the true spirit of sport is bound up the spirit of schoolboy honour, and thus the German boy is less careful than the English boy about giving his word, and the master less ready to accept it. Again, if it is true that excess of athletics may have a brutalising effect, it is no less true that a boy's mind does not remain healthy in their total absence. The German schoolboy is too frequently a philosopher and a freethinker, and runs the danger of degenerating in extreme cases into one of those men, who spend their leisure time in cafés, studying the newspapers and "politic-making." Lastly the German schoolboy is lacking in *esprit de corps* as compared with the English. It is not superfluous to emphasise these facts even when writing chiefly for English readers. With the increase of wealth, and luxury, it is daily becoming more essential that our boys should receive a healthy and manly training, while at the same time the outcry against the abuse of athletics is growing louder. It is because we pay more careful attention to developing the body as well as the mind, that our Higher Schools, if only reformed in other directions, may finally excel those of Germany. For in Germany it will probably be a long step from theory to practice in the matter of organised outdoor games. The parents have little faith in them, the bigger boys regard them as suitable for children, and it may be doubted whether a majority of masters would give them more than a moral support. The whole attitude of the German towards all kinds of sport is entirely different from that of the Englishman: the latter believes that work and play go best together, and fills the pauses in the one by the recreation of the other, but the German is apt to consider that the two things are incompatible.

§ 82. We have seen that Baden considers her Higher School system deficient in regard to the preliminary training of masters. One may indeed hear it asserted by Baden educational authorities that in regard to this point they are little if at all in advance of us. But this view is too pessimistic, and cannot be accepted by

us as supplying us with any ground for comfort as regards our own deficiencies. Too few capable teachers may be attracted to the teaching profession. The best methods of teaching may be more carefully and more successfully followed in Elementary than Higher Schools. These are faults which Baden and England have in common. But there is no possible question that the Higher School masters of Baden are as a general rule better prepared than are ours for the duties upon which they enter. They have at all events gained some theoretical knowledge of teaching methods. They have heard experienced masters teach, and have compared their merits and defects. They have themselves made the first experiments in teaching. In fact they have done precisely what very many English schoolmasters ought to have done in order to prevent one or more terms of their school work from being spent in acquiring experience, if not altogether wasted. Yet perhaps by reverting to the subject of our last paragraph we may find one point in which the English master possesses an advantage over the German. It is that he is frequently a man who by virtue of his Public School and University training is full of sympathy for boyish nature and boyish sports, and is by that very fact greatly aided in securing the interest and attention of his pupils.

§ 83. In Baden both headmasters and assistant masters are State servants, directly dependent upon the State. It is natural to ask: does this not lessen the authority of the headmaster? In Baden it does not. In Baden headmasters are as successful as in England in winning the affection and respect of the boys and masters with whom they have to deal. For these are things that depend far more upon the individuality of the headmaster, upon his tact, scholarly attainments, and strength of character, than upon any system of school-control. And on the other hand there is an immense gain to Higher Education in Baden in the very fact that there is there only one link in the chain of the dependence of masters, while with us there are two. In England the headmaster is usually dependent upon some governing body, but the assistant master is very often to all intents and purposes entirely dependent on the headmaster, whether for increase of salary or other preferment, or for the testimonials that may control his further career. This is a position false for headmaster and assistant alike. To it may be traced many of the jealousies which too often disfigure the relations of English school staffs. From it arises the antagonism of interest and effort which too often exists between headmasters and their colleagues.

§ 84. Headmasters and assistant masters do not work together in England as in Baden for the advancement of their profession. Even though they were in no single instance disunited in promoting the interests of their particular schools, there is a wider union required, the union of all masters in the recognition of interests common to all schools. This wider spirit of loyalty is conspicuously wanting among a large number of the masters of our Higher Schools, while it as conspicuously imbues all who in Baden are concerned with Higher Education. The advantages that have thereby accrued to Baden have been dwelt upon in previous

pages.* All that Baden gains we lose. Whatever their record of individual success, our Higher Schools are still trammelled by the disadvantage of what, viewed in this aspect, is not unlike a feudal system, while in a province of imperial Germany we can look with envy upon the solid progress of an educational democracy.

§ 85. Are individual enterprise and experiment encouraged or hampered by central control, since on experiment all progress is held to depend? They are limited to this extent that they must receive the sanction of the central authorities. But this is a gain rather than a hindrance where the central authorities are wisely chosen. For it is not likely that any experiment for which sufficient grounds can be shewn, will be forbidden, and many will be tried which there might have been no opportunity of conducting in the absence of central control. Experiments are being carefully watched in Baden day by day from the trial of improved apparatus for classrooms to the institution of a Reformgymnasium. The Oberschulrat would undoubtedly attribute much of the more recent progress of the Higher Schools† mainly to the care with which it has followed experiments, the freedom granted to those who have proposed them, in some cases to the pressure it has employed in order to secure their trial.

§ 86. Some last considerations arise upon the question of uniformity of curricula not only as prescribed for all schools, but as imposed on each individual boy. In Baden a boy who wishes to pass his Leaving Examination, must complete the course of work allotted to every class above that which he enters, and must satisfy his masters in every subject professed by the class. A school class represents a school year. In other words there is neither terminal promotion nor promotion in single subjects in Baden, nor is there anything resembling our practice of "specialising" boys. Here are points upon which a wide difference of opinion would probably be found between our headmasters and those of Baden. The former would perhaps claim that they produce results in particular cases with which Baden cannot compete. They would say, and rightly, that no Baden Gymnasiast could win a classical scholarship at Oxford or Cambridge, and would point to boys who have gained as many as six distinctions in the Oxford and Cambridge Examination for Certificates to prove the advantages of specialisation where a pupil is brilliant enough to specialise, as it were, in several subjects. The Baden headmaster might reply that the average English boy leaves school having obtained a superficial knowledge often acquired only to be forgotten again; that he has received a one-sided mental training, and has neither been stimulated to nor prepared for scientific or original study. He might assert that the majority of our pupils are sacrificed to the gifted minority in the competition for entrance scholarships

* § 70, § 71 and note.

† *e.g.*, the adoption of the Analytic Method of modern language teaching, v. § 32.

at the Universities and for similar distinctions, and he might add that this competition sometimes claims even those who are successful as its victims, since they have been filled too early with much special knowledge which in their lack of a broader scientific training they cannot turn to good account in further studies. Such a criticism would not be altogether unsupported by the report which the Royal Commission on Secondary Education issued in 1895. Even if we insist that boys are fashioned too much into one intellectual likeness under the Baden system, we must recognise this compensating advantage. A student enters the Universities of Baden with a fresh field before him. In England the work of school and University overlaps to a serious degree. A classical scholar of an Oxford college ought to be able to get his "first class" in Honour Moderations with very little additional effort, and almost any Sixth Form boy to *pass* the examination on a minimum of work. This is a fruitful cause of idleness. Moreover, it is true that many schoolboys who enter our Universities under no great stimulus to steadily pursue their classical studies, have been inspired with no interest for any other branch of study, and are in danger of wasting their time entirely. Specialisation in our schools is largely resorted to for the purpose of passing special examinations. These examinations are competitive. Many schools are dependent upon the results they achieve in them. The inevitable consequence is a system of cramming, a neglect of the duller boy for the sake of the more brilliant, and a training of the latter which, while starving some subjects, introduces him in others to work which would better be left to the University. Such a method does not seem to look far beyond mere school results. It is diametrically opposed to that followed in Baden. Here we find that no subject is unduly subordinated to others, but that all are subordinated to objects which they have in common. These are to enable the pupil to express himself with ease and accuracy in his own language, and to develop his powers of observation and of reasoning. In other words, while a due amount of work is required of him, he is provided with a fitting foundation for maturer study. It is in the work of the man that the results of teaching are sought rather than in the work of the boy. It is this which to no small extent accounts for the difference between German and English scholarship, which is as marked now as when Prof. J. B. Mayor emphasised it in his *Guide to the Choice of Classical Books*. And it may partly explain why Germans so often speak of the average Englishman as devoid of all deeper knowledge.

In closing this report the writer wishes to express his sincere appreciation of the courtesy and kindness which he everywhere experienced in Baden in educational circles. His special thanks are due to Geh. Hofrat, Dr. E. von Sallwürk, and to Direktors Dr. G. Wendt, Dr. Treutlein, Dr. Firnhaber, and Dr. Löhlein.

H. E. D. HAMMOND.

APPENDIX I.

The Finance of the Higher Schools of Baden.

A.—Total Expenditure and Receipts of Higher Schools in 1895.*

	Expenditure.	Receipts.				
		Government Grant.	School Fees.	Local Grant.	Private Funds.	Other Sources.
	£	£	£	£	£	£
Gymnasien and Progymnasien	58,349	24,977	18,280	2,935	12,047	110
Realgymnasien and Realschulen	56,995	19,638	13,205	21,525	2,602	25
Höhere Mädchenschulen..	17,247	1,750	8,752	6,212	—	—

* Wendt "Organisation des höheren Unterrichts im Grossherz Baden," p. 186.

For each of the financial years of 1896 and 1897 there was an estimated increase of expenditure for the

Gymnasien and Progymnasien of ... £1,300
Realgymnasien and Realschulen of ... £3 850

B *The expenditure and income of the Realgymnasium Oberrealschule and Realschule and Höhere Mädchenschule of Karlsruhe as illustrating the finance of individual schools:—

	1. Realgymnasium.	Estimate for 1897.		Estimate for 1896.	Accounts of 1895.
(*a*)	Income.	£ s.	£ s.	£ s.	£ s.
1	From buildings	—	65 0	65 0	68 0
2	From fees—				
	(*a*) Entrance fees	28 0			
	(*b*) School fees	1,545 0			
	(*c*) Special fees	19 0			
			1,592 0	1,431 0	1,398 0
3	Grant from Government..	—	1,709 0	1,399 0	1,502 0
4	Grant from town of Karlsruhe (being a grant to cover the expenditure as far as it is not covered by other receipts)	—	3,412 0	3,454 0	1,469 0
5	Miscellaneous receipts ...	—	10 0	7 0	8 0
	Total Income.....	—	£6,788 0	£6,356 0	£4,445 0

* The details of the Finance of the Gymnasium were not obtainable.

	I. Realgymnasium.	Estimate for 1897.		Estimate for 1896.	Accounts of 1895.
(*b*)	Expenditure.	£ s.	£ s.	£ s.	£ s.
1	Repairs	12 10	—	12 10	7 9
2	Postage	1 15	—	1 15	0 7
3	Salaries of masters and school servants	4,242 10	—	3,675 0	3,700 8
4	School buildings	2,062 0	—	2,196 0	279 13
5	School inspection, examinations, &c.	32 10	—	32 10	29 8
6	Inner requirements of the school	409 10	—	414 0	437 18
7	In aid and encouragement of certain pupils	15 0	—	12 0	14 19
8	Miscellaneous	12 5	—	12 5	13 18
	Total Expenditure	—	£6,788 0	£6,356 0	£4,484 0

	II. Oberrealschule and * Realschule.	Estimate for 1897.		Estimate for 1896.	Accounts of 1895.
(*a*)	Income :	£ s.	£ s.	£ s.	£ s.
1	From buildings :				
	Oberrealschule	43 10	—	—	—
	Realschule	92 10	—	—	—
			136 0	118 12	97 14
2	From School fees :				
	Oberrealschule	1,123 7	—	—	—
	Realschule	900 0	—	—	—
			2,023 7	1,990 12	1,999 19
3	Grant from Government	—	2,142 17	1,672 0	1,889 0
	Grant from town of Karlsruhe (being a grant to cover the expenditure as far as it is not covered by other receipts)	—	5,962 16	5,531 5	1,551 13
	Miscellaneous Receipts	—	2 0	2 0	5 9
	Total Income of Oberrealschule and Realschule	—	10,267 0	9,314 9	5,543 15

* The rapid increase in the numbers of the Oberrealschule made it necessary in 1895 to divide the school into an Oberrealschule and a seven-class Realschule.

	II. Oberrealschule and * Realschule.	Estimate for 1897.		Estimate for 1896.	Accounts of 1895.
		£ s.	£ s.	£ s.	£ s.
(*b*)	Expenditure: Oberrealschule.				
1	Repairs	20 0	—	20 0	23 3
2	Postage	1 5	—	0 15	0 16
3	Salaries of masters and school servants	3,694 7	—	3,266 16	5,038 2
4	School buildings	1,655 7	—	1,661 0	173 19
5	School inspection, examinations, &c.	40 0	—	40 0	38 6
6	Inner requirements of the school	314 15	—	302 5	301 0
7	In aid and encouragement of certain pupils	10 0		10 0	9 16
8	Miscellaneous	10 5	—	8 15	13 6
	Total Expenditure of Oberrealschule	—	5,745 19	5,309 11	5,598 8

	Realschule.	£ s.	£ s.	£ s.	£ s.
1	Repairs	15 0	—	15 0	—
2	Postage	2 0	—	0 15	—
3	Salaries of masters and school servants	2,495 2	—	1,964 14	—
4	School buildings	1,603 19	—	1,570 19	—
5	School inspection, examinations, &c.	30 0	—	40 0	—
6	Inner requirements of the school	351 5	—	389 15	—
7	In aid and encouragement of certain pupils	15 0	—	15 0	—
8	Miscellaneous	8 15	—	8 15	—
	Total Expenditure of Realschule	—	4,521 1	4,004 18	—
	Total Expenditure of Oberrealschule and Realschule	—	10,267 0	9,314 9	—

* The rapid increase in the numbers of the Oberrealschule made it necessary in 1895 to divide the school into an Oberrealschule and a seven-class Realschule.

	III.—The Höhere Mädchenschule.	Estimate for 1897.		Estimate for 1896.	Accounts of 1895.
(*a*)	Income:		£ s.	£ s.	£ s.
1	School fees	—	2,116 14	2,148 5	2,131 7
2	Endowments	—	3 17	3 18	3 16
3	Grant from Government..	—	250 0	250 0	250 0
4	Grant from town of Karlsruhe (being a grant to cover the expenditure as far as it is not covered by other receipts)	—	2,701 17	2,396 13	1,402 8
5	Miscellaneous receipts ...	—	—	—	1 0
	Total Income.....	—	5,072 8	4,798 16	3,787 12

(*b*)	Expenditure:	£ s.	£ s.	£ s.	£ s.
1	Repairs	20 0	—	25 0	16 15
2	Postage.....	0 15	—	0 15	0 6
3	Salaries of teachers and school servants	3,189 7	—	3,064 5	3,126 3
4	School buildings.....	1,545 6	—	1,390 6	342 9
5	School inspection, examinations, &c.	22 10	—	22 10	20 3
6	Inner requirements of the school	271 5	—	270 5	253 5
7	In aid and encouragement of certain pupils..	2 10	—	2 10	1 8
8	Miscellaneous	20 15	—	23 5	16 14
	Total Expenditure ...	—	5,072 8	4,79 16	3,777 3

APPENDIX II.

* CURRICULA OF THE GYMNASIUM, OBERREAL (AND REAL) SCHULE, AND HÖHERE MÄDCHENSCHULE OF KARLSRUHE.

OBERREALSCHULE.

GERMAN:

Class VI. (pupils of 10 years and upwards.)

Reader. Paldamus, Part II.
Repetition. Many Poems.
Grammar. The purely simple sentence and the parts of speech therein.
Written Work. Essay or Dictation weekly.

Class V. (pupils of 11 years and upwards.)

Reader. Paldamus, Part III. Pieces are read, explained, and rendered in the pupil's own words.
Repetition. Prose and poetry.
Grammar. The simple sentence with its enlargements and extensions.
Written Work. Essays and Dictation.

Class IV. (pupils of 12 years and upwards.)

Reader. Paldamus. Specimen pieces read with explanation of language and subject matter. Practice in arrangement of subject matter.
Repetition of previously explained pieces both as in the original and in the pupil's own words.
Grammar. The compound sentence and the parts of speech therein.
Reproduction of narratives and descriptions, the arrangement of whose subject matter has been previously explained and written down. Practice in letter-writing, with hints upon the necessary style, and study of pattern letters.

Class IIIb. (pupils of 13 years and upwards.)

Reader. Paldamus, Part V. Selected pieces of prose and verse, especially those referring to German mythology and history, with explanation of language and subject matter.
Repetition. Declamation of Poems. Elements of Prosody.

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* It was not thought necessary to give the curriculum of the Realgymnasium besides those of the Gymnasium and Oberrealschule, nor to give the details of the religious instruction, Catholic, Old Catholic, Jewish, and Evangelical.

Grammar. Revision of past work. The use of the parts of speech, especially of the verb.
Written Work. Twelve essays partly in letter-style, partly descriptive or historical.

Class IIIa. (pupils of 14 years and upwards.)

Reader. Paldamus, Part V. Homer's Odyssey (Weissenborn).
Repetition and Prosody.
Grammar. Forms and usage of nouns, adjectives and pronouns. Figures of speech.
Written Work. Practice in narrative and descriptive style, business letters, and arrangement of subject matter.

Class IIb. (boys of 14 years and upwards.)

Homer's Iliad, Schiller's "Wilhelm Tell" and "Kulturgeschichtliche Gedichte," Riehl's "Land und Leute."
Etymology. Ten Essays and exercises in the analysis and arrangement of subject matter.

Class IIa. (pupils of 15 years and upwards.)

Goethe's Poems, "Hermann und Dorothea," "Wallenstein," "Iphigenia in Tauris," "Antigone."
Revision of past work in grammar. Review of dialects of Baden, especially of the Alemannic in connection with Hebel's Alemannic poems.
Nine Essays.

Class Ib. (pupils of 16 years and upwards.)

History of German literature up to Lessing. Niebelungenlied, Walther von der Vogelweide. The "Ajax" and "Œdipus."
"Œdipus Rex" of Sophocles, Schiller's "Braut von Messina," and Riehl's "Bürgerliche Gesellschaft."
Practice in Rhetoric and Logic.
Nine Essays.

Class Ia. (pupils of 17 years and upwards.)

History of German literature up to the present day. Thorough treatment of the six great poets of the newer literature. Practice in Declamation.
Nine Essays.

FRENCH:

Class VI.

Introduction to the French language upon the basis of object lessons, for which are used Hölzel's coloured wall pictures and Rossmann and Schmidt's Handbook. Exer. 1–25.

Practice in pronunciation according to the phonetic system.
Written Work. In first four months none. Afterwards once a week.

Class V.

Reader. Rossmann and Schmidt, Exer. 29–49.
Practice in pronunciation.
Written Work. Dictation or composition weekly.

Class IV.

Reader. Rossmann and Schmidt, Exer. 54 to end.
Practice in pronunciation.
Treatment of irregular verbs met with in reading and in conversation.
Written Work. Dictation or composition weekly.

Class IIIb.

Reader. Saure, Part I.
Grammar. Plötz-Kares' shorter school grammar, lessons 1–30, exercises translated both orally and in writing.
Practice in speaking.
Written Work. Dictation and Exercises.

Class IIIa.

Plötz-Kares' shorter school grammar, lessons 26–53 otherwise as in IIIB.

Class IIb.

Reading. Souvestre, "Au coin du feu."
Grammar. Plötz-Kares 1–53, revised and supplemented by illustrations from reading.
Practice in understanding and speaking.
The first steps in letter-writing.
Twenty-four written exercises.

Class IIa.

Reading. Arago, "James Watt" (in part); Augier "Gendre de M. Poirier," Molière, "Avare."
Grammar. Plötz-Kares finished and revised.
Practice in conversation.
Written Work.

Class Ib.

Reading. Corneille, "Le Cid," Sandeau, "Mademoiselle de la Seiglière," "Lettres françaises."
Grammar. Revision and supplementary examples.
Practice in understanding, speaking, and declamation.
Written Work in connection with books read, with the literature and history of the last three centuries, and with French life and culture at the present time.

Class Ia.

Reading. Corneille "Le Cid," Molière "Les femmes savantes," Voltaire, "Zaire." Reclus, "En France."
Grammar. Revision and supplementary examples.
Conversation and Written Work (essays, prose or dictation) in connection with reading.

ENGLISH:—

Class IIIb.

Conversational object lessons according to Dr. Ferdinand Schmidt's "Lehrbuch der englischen Sprache," lessons I.–XV.
Written Work. One exercise weekly.

Class IIIa.

Reading. Poetry, Schmidt's "Lehrbuch der englischen Sprache," lessons X.-XXX.
Written Work (done in class). Essays and dictation.

Class IIb.

Reading. Massey, "In the struggle of life," with practice in declamation, speaking, and writing.
Grammar. Revised and supplemented by illustrations from reading. Deutschbein's "Lehrgang der englischen Sprache" to lesson 61.
Twenty-one written exercises.

Class IIa.

Dickens' "Christmas Carol," with practice in conversation.
Grammar. Systematic treatment of the most important rules according to Deutschbein.
Written Work in connection with reading.

Class Ib.

Reading. "Shakespeare's Julius Cæsar," "On English life and customs" (Gärtner, Berlin.)
Grammar. Revised and supplemented. Synonyms.
Practice in understanding, speaking, and declamation, and Written Work in connection with reading and with English culture.

Class Ia

Shakespeare's "Richard II.," Tyndall's "Fragments of Science."
Grammar revised and supplemented.
Conversation and Written Work in connection with reading.

ITALIAN :

Classes IIb. and IIa.

Conversation and Grammar according to Hölzel's "La Primavera" and Martin's "Italienische Sprachlehre."

Classes Ib and Ia.

Enrico Castelnuovo, Selected stories.
Practice in understanding and speaking.
First steps in letter-writing.
Grammar revised and supplemented.

HISTORY :

Class IV.

Greek and Roman History from Martens' Reader.

Class IIIb.

History of the German People up to the Reformation from Martens' Reader.

Class IIIa.

From the migration period to the beginning of the 17th century from Andrä's Outlines.

Class IIb.

More modern times.

Class IIa.

Greek and Roman History from Martens' Reader.

Class Ib.

Middle ages and more modern history to 1648.

Class Ia.

1648–1871. The Constitution and Administration of the German Empire and of Baden.

GEOGRAPHY :

Class VI.

General Division of land and water. Survey of Baden. Illustrative cards. From Seydlitz and Neumann.

Class V.

Germany, especially in its physical aspect, also Baden according to Seydlitz. Illustrative cards.

Class IV.

Other European countries treated more or less in detail according to their respective importance for Germany. Illustrative cards.

Class IIIb.

Non-European countries with special attention to those that have intercourse with Europe. Physical peculiarities treated in connection with the work done in Natural History. Illustrative cards.

Class IIIa.

The most important facts of mathematical and physical geography. The German colonies. Ways and means of international intercourse.

NATURAL HISTORY:

Class VI.

Specimens from the animal and vegetable kingdoms. Some minerals. Pokorny's Handbook.

Class V.

Description of vertebrates. Flowering plants of simple construction. Some minerals, and, in connection with these, practical observation of simple physical and chemical processes.

Class IV.

Winter. Zoology. Invertebrates, especially insects.
Summer. More complex flowering plants. Classification of plants. Extension of winter work. Practical observation.

Class IIIb.

Winter. Vertebrates.
Summer. Practical observation. Classification of plants. Outlines of the anatomy and physiology of plants.

Class IIIa.

Anatomy of the human body, hygiene. Invertebrates, especially the lowest classes. Anatomy and physiology of plants, the lowest forms of cryptogams.

PHYSICS:

Class IIIa.

Preliminary course. Mechanics, magnetism, electricity. Sketches of apparatus and the arrangement of experiments. Six papers done in class.

Class IIb.

Heat, optics, acoustics; sketches of apparatus and the arrangement of experiments. Sumpf's outlines. Six papers done in class.

Class IIa.

Magnetism, electricity.
Sketches of apparatus and arrangement of experiments.
Six papers done in class.

Class Ib.

Theory of waves; heat; optics; acoustics.
Sketches of apparatus and arrangement of experiments.
Six papers done in class.

Class Ia.

Statics and dynamics; mathematical geography.

CHEMISTRY:

Class IIb.

Wäber's Textbook. General laws of combinations. The non-metals. Stoichiometric calculations.
Sketches of apparatus and arrangement of experiments.
Wäber's Handbook.

Class IIa.

The metals, and important parts of organic chemistry Calculations.
Sketches of apparatus and arrangement of experiments

Class Ib.

Organic chemistry. Crystallography and mineralogy.
Drawings and papers done in class.
Practical chemistry (voluntary).

Class Ia.

Revision of organic and inorganic chemistry. Mineralogy and geology (atomic and molecular theory).

Quantitative Analysis. Periodic system. Calculation of volume relations in chemical actions. History of chemistry. Drawings and papers done in class.
Factories visited.
Practical chemistry (voluntary).

WRITING:

Class VI.

Roman characters; also German characters after Easter. Writing drill, test exercises once a month.

Class V.

As in Class VI.

Class IV.

As in Class VI., with the addition of roundhand.

DRAWING:

Class V.

Simple curved and slanting lines. Geometrical figures, simple surface ornaments.

Class IV.

Copying of simple surface ornaments, with experiments in drawing simple geometrical bodies.

Class IIIb.

Copying of geometrical bodies, and simple objects.

Class IIIa.

Copying of simple models of natural objects.

Class IIb.

Drawing of ornaments and heads from models and plastercasts. Simple artistic objects. Simple studies of colour.

Class IIa.

Drawing from plastercasts of plants, masks and ornamental models. The human form.

Class Ib.

Freehand drawing. Drawing from models of plants and ornamental patterns. Drawing of the human form, especially of the head, from models.

Class Ia.

Freehand drawing. Drawing from figurative models and casts. Drawing from nature. Studies of colour. Pen and ink drawings.

SINGING:

Class VI.

Training of voice and ear. Note reading. The simple measures of time. Eighty theoretical exercises according to Albrecht, first grade. Folksongs, catholic and evangelical hymns and chants.

Class V.

Theoretical exercises. Folksongs, choral singing, catholic and evangelical hymns and chants.

Class IV.

More advanced theoretical exercises. Folksongs, choral singing.

Class IIIb.

Choral singing in parts. Patriotic songs and Folksongs. Psalms and motets (together with all the higher classes).

Classes IIIa., IIb., IIa., Ib., Ia.

Vide Class IIIB.
N.B.—Class IB also professes choral singing from Palme's "Sang und Klang."

GYMNASTICS:

In classes according to Maul's Textbook for school years I.–IX.

MATHEMATICS:

Class VI.

Arithmetic. The simple rules in relation to abstract numbers and simple concrete quantities. Resolution

of numbers into prime factors. Coins, weights and measures. The four simple rules in relation to compound quantities with practice in oral and written work. Vulgar fractions begun.

Class V.

Arithmetic. Revision of past work. The four first rules applied to vulgar and finite decimal fractions. Conversion of such decimals into vulgar fractions and *vice versa*. Easy examples of rule of three.

Geometrical object lessons. Observation, description and comparison of simple bodies. Straight line, circle, angles, parallel lines. Symmetry. Properties of the triangle, quadrilateral, polygon, circle. The use of ruler, set-square, and compasses.

Class IV.

Arithmetic. Revision of theory of fractions. Recurring decimals. Mental Arithmetic. Simple and compound proportion. Calculation of interest. Extraction of square root.

Geometry. Equality, transformation and division of plane figures. Mensuration.

Class IIIb.

Arithmetic and algebra. Revision of past work. Compound interest, discount, profit and loss.

The compound rules applied to arithmetical and algebraical quantity. Bardey's exercises I.–VII. Fifteen class papers.

Geometry. Formation of plane and solid figures. Mensuration of surfaces and volumes of figures bounded by planes. The theory of parallels, congruency, the equilateral triangle.

Class IIIa.

Arithmetic and algebra. Practical and commercial arithmetic. Measurement of numbers. Divisibility. Resolution into prime factors. Proportion. Powers. Equations of the first degree with one unknown. Fifteen papers in class.

Geometry. Theory of circle. Quadrilateral. Comparison of areas. Constructions. Six papers in class.

Class IIb.

Arithmetic and algebra. Stocks. Involution and evolution. Equations of the first degree with one and more unknowns. Bardey's exercises. Fifteen papers in class.

Geometry. Similarity of plane figures. Comparison and calculation of areas. Six papers in class
Geometrical drawing. Plane figures.

Class IIa.

Arithmetic and algebra. Logarithms. Harder equations of the first degree with one or more unknowns. Equations of the second degree. Progression. Compound interest and stocks. Real, imaginary and complex numbers. Paperwork at home and in class.
Geometry. Geometrical representation of algebraical expressions and their application to the solution of problems. Plane trigonometry and general goniometry.
Geometrical drawing. Survey and drawing of simple bodies. Theory of projection.

Class Ib.

Arithmetic and algebra. Continued fractions. Simple indeterminate equations. Combinations. Binomial theorem. Probabilities. Class papers.
Geometry. Solid geometry and spherical trigonometry.
Geometrical drawing.

Class Ia.

Arithmetic and algebra. Revision of work done in classes IB. and IIA. Cubic equations. Equations of higher degree. Class papers once in three weeks.
Geometry. General revision. Conic sections as geometrical loci, and as sections of a cone. Elements of analytical geometry.
Geometrical drawing. Constructions from class work in geometry. Elements of perspective.

SHORTHAND (voluntary):

Classes IIb., IIa., Ib., and Ia., work together according to Roller's system.

Special Commercial Class (reckoned between IIb. and IIa.).

German:

Schiller's "Glocke." Kleist's "Hermannschlacht" and "Prinz von Homburg." Riehl's "Familie."
Ten Essays.

German Business Correspondence:

Circulars, Memoranda to debtors, letters of acknowledgment, and inquiry. Letters concerning goods, bonds and securities; explanation of the most important points in German commercial law. Written work at home, and eight papers in class.

French Business Correspondence:

Introduction to business correspondence and terminology according to Witzel and Messien's exercises. Connected series of exercises in business letter-writing according to Dr. E. Hönncher. Practice in reading *fac-similes* of letters according to E. Rolfs.
Frequent practice in written work.

English Business Correspondence:

Vide French Business Correspondence. Similar books and by the same authors are used.

French Conversation:

Principally in connection with reading of Kron's "Le petit Parisien."

English Conversation:

Based on Gaspey's "English Conversation." I. Social and commercial. II. Historical. III. Everyday life.

Italian:

Introduction to Italian conversation according to Hölzel's "Practice in Conversation" and Dr. Fassano's "Journey to Rome." Grammatical exercises, and introduction to business correspondence according to Guglielmo Locella's Textbooks.

History:

More modern times.

Commercial Geography:

Thorough treatment of the five divisions of the earth according to Engelmann's Textbook, sections 1–208.

Book-keeping:

Principles of single and double entry. Thorough insight into the management of a large business house (A. Bergmann's Handbook), and of numerous small businesses (Hauck and Schär's Handbook). Working through of Imperial Bank entrance examination papers. Thorough explanation of the various methods of banking.
Six papers in class, and six at home.

Commercial Arithmetic:

Calculation of interest, discount, and payment by instalments. Bonds, money, bills of exchange. Simple and complex calculations of wares according to Hauck's Handbooks. Imperial Bank entrance examination papers.
Fifteen papers in class.

Caligraphy:

Ornamental writing. Roundhand.

GYMNASIUM.

GERMAN:

In Classes VI., V., IV., the most simple grammatical rules and syntax. Dictation as practice in orthography.
From Class IV., upwards, essays.
In all Classes practice in reading and repetition of poetry.
From Class III*a.*, upwards, treatment of greater poems and selected prose writings.
In Class II., the elements of style in prose and poetry.
In Class I*b.*, Middle High German grammar and reading.
In Class I*a.*, Review of the history of literature.

LATIN:

Class VI. (pupils of 10 years and upwards).

Accidence (regular examples) from Schmidt and Lierse's Primer.
Written work.

Class V. (pupils of 11 years and upwards).

Completion of accidence from Schmidt and Lierse's Primer.
Written work.

Class IV. (pupils of 12 years and upwards).

Grammar. Use of cases from Schmalz-Wagener.
Reading. Parts of Stein's Reader, and some fables of Phaedrus.
Written Work.

*Class III*b.* (pupils of 13 years and upwards).

Reading. Cæsar de bello Gallico. (In div. A, II. and V., in div. B, II., IV., V.); then selections from Ovid's Metamorphoses.
Grammar. Use of moods and tenses from Schmalz-Wagener.
Written work.

Class IIIa. (pupils of 14 years and upwards).

Reading. Cæsar de bello Gallico I. and VII. Selections from Ovid's Metamorphoses.
Grammar. Stegmann, sections 214–255.
Written work.

Class IIb. (pupils of 15 years and upwards).

Reading. Livy (in div. A, XXI., in div. B, V.), Vergil Aen (in div. A, I., in div. B, parts of I. and II.), Cicero de imp. Cn. Pomp.
Grammar revised.
Written exercises.

Class IIa. (pupils of 16 years and upwards).

Reading. Livy (in div. A, V., and XXII., in div. B, XXI., and XXII.); Sallust (in div. A, Catiline, and Jugurtha, in div. B, Jugurtha); Cicero in Cat. I. and IV., Vergil Aen. (in div. A, II., in div. B, parts of II., IV. and VI.). Some Ovid.
Written Work.

Class Ib. (pupils of 17 years and upwards).

Tacitus, Ann. I. and II., and Germania; Cicero (in div. A, pro Archia and pro Milone, in div. B, selected letters (Süpfle-Böckel), Horace, Odes I. and II. (in div. B, part of III. also), and selections from the Satires.
Written work.

Class Ia. (pupils of 18 years and upwards).

A selection from Cicero's Letters in connection with Cæsar bell. civ. Tacitus Ann, XI.–XVI. (selections). Horace, Odes III. and IV. Selections from Satires and Epistles. Some portions of the elegiac poets (Biese).
Written work.

GREEK:

Class IIIb.

Accidence up to verbs in μι (exclusive). Wendt's Grammar, and Kaegi's exercises.
Written work.

Class IIIa.

Reading. Xenophon Anabasis I.
Grammar. Completion of Accidence
Written work.

Class IIb.

Reading. Xenophon Hellenica I. and II. (selections). Homer Odyssey I., V.–X. Also, in div. A: Xenophon Anabasis III. and IV. in div. B: Herodotus I. (selections).
Grammar. Use of cases.
Written work.

Class IIa.

Reading. Herodotus VI.–IX. (selections). Homer Odyssey, 2nd half. Biese's Selection from the Greek Lyric Poets (elegiac, iambic, epigrammatic).
Grammar. Use of moods and tenses.
Written work.

Class Ib.

Reading. Plato, Apology, Krito, Phædo (beginning and end); (in div. A: Laches, in div. B: Eutyphro). Homer Iliad I.–XII. Sophocles Philoctetes and Ajax.
Grammar revised.
Written work.

Class Ia.

Reading. Homer, Iliad, 2nd half. Sophocles, Oedipus Rex and Antigone. Demosthenes Phil. I. and III., Olynth, I de pace. Also in div. A: Thucyd. VI. VII., in div. B: Plato, Gorgias.
Written work.

FRENCH:

Class IV.

Ciala's Grammar, Part I. to §60, with accompanying reading exercises.
Written work.

Class IIIb.

Ciala's Grammar, Parts I. and II., with accompanying reading exercises.
Written work.

Class IIIa.

Reading. Bruno, "Le Tour de la France."
Ciala's Grammar, Part II.
Written work.

Class IIb.

Reading. Div. A. Daudet, "Le petit chose." Erckmann-Chatrian, "L'histoire d'un conscrit." Div. B: La Fontaine, Fables. Dhombres et Monod, "Biographies Historiques."
Ciala's Grammar, Part III.

Class IIa.

Reading Béranger, Chansons. Sandeau, "Mdlle de la Seiglière," in div. A: Duruy, "Révolution," in div. B: Sarcey "Siège de Paris."

Class Ib.

Reading. Racine, "Andromaque." Coppée, Poésies. Loti "Pécheurs d'Islande."

Class Ia.

Reading. Molière, "Tartuffe." Augier et Sandeau, "Le Gendre de M. Poirier." Lanfrey, "Campagne de 1806–1809."

HISTORY:

Class IV.

Greek and Roman History. Müller's Smaller Handbook.

Class IIIb.

German History up to 1648. Müller's Smaller Handbook.

Class IIIa.

German History since 1648. Müller's Smaller Handbook.

Class IIb.

Greek History. (Herbst-Jäger.)

Class IIa.

Roman History. (Herbst-Jäger.)

Class Ib.

The Middle Ages, and subsequent History till 1618. (Herbst-Jäger.)

Class Ia.

More modern times. (Herbst-Jäger.)

GEOGRAPHY:

Class VI.

Survey of foreign lands.

Class V.

Europe—especially Germany.

Class IV.

Foreign lands.

Class IIIb.

Physical and political geography of Germany. (Seydlitz's school geography.)

Class IIIa.

Foreign European Countries. (Seydlitz's school geography.)

MATHEMATICS:

Class VI.

Arithmetic. Calculations with abstract and concrete numbers. Introduction to use of decimal fractions.

Class V.

Vulgar and decimal fractions. Contracted reckoning. Weights and measures.

Class IV

Mental and commercial arithmetic.

Class IIIb.

Arithmetic. The three first simple rules.
Geometry. Straight lines, angles, figures with centre and diameter (Henrici and Treutlein's Handbook, Part I., Ch. 1–4).

Class IIIa.

Arithmetic and Algebra. Multiplication, Division, Fractions. Equations of the first degree with one unknown. (Bardey's Exercises.)
Geometry. Congruency of triangles. The circumference. Constructions.

Class IIb.

Arithmetic and Algebra. Involution; Evolution; Powers with negative Indices. Equations of the first degree with one and more unknowns. Proportion. (Bardey's Exercises.)

Geometry. Quadrilateral, and regular quadrilateral: comparison of the areas of closed figures. Measure and ratio of segments. Perspective similitude.

Class IIa.

Arithmetic and Algebra. Powers with negative and fractional exponents. Equations with several unknowns. Quadratic Equations with one unknown. Exponential equations. Logarithms. (Bardey's Exercises.)

Geometry. Ratio of segments in two-ray. Similarity. Calculation of areas and segments; measurement of circles. Angular functions. Trigonometry.

Class Ib.

Arithmetic and Algebra. Arithmetical and Geometrical series. Compound Interest and Stocks. (Bardey's Exercises.)

Geometry. Conclusion of Trigonometry. Solid Geometry.

Class Ia.

Arithmetic and Algebra. Combinations. Binomial theorem. Complex numbers. Continued fractions. Diophantine equations. Revision of past work.

Geometry. Conic sections as geometrical loci. Harmonic points and rays. Pole and Polar in reference to the circle. Representation of figures of one plane in another plane, especially representation of the circle as a conic section. Revision of past work.

STUDY OF NATURE:

Classes VI. and V.

Description of single specimens of animals and plants.

Class IV.

Comparison of plants and animals with regard to their classification.

Class IIIb.

Vertebrates and invertebrates. Anatomy of plants.

Class IIIa.

Anthropology. Anatomy and Physiology of plants.

Class IIb.

Physics: Magnetism, Electricity, Heat.

Class IIa.

Physics: Mechanics, Optics.

Class Ib.

Physics: Principles of Chemistry. Crystallography, Mineralogy Geology.

Class Ia.

Physics: Mechanics. Astronomical Geography Optics.

PHILOSOPHY:

Class Ib.

Empirical Psychology.

Class Ia.

Logic.

WRITING:

Classes VI. and V.

Writing in German and Latin characters.

DRAWING (New scheme since January):

Class VI.

Figures with straight and curved lines. Drawing from models and from memory.

Class V.

The work of Class VI. more fully treated.

Class IV.

Geometrical drawing. Theory of projection.

Class IIIb.

Perspective. Drawing in perspective from geometrical bodies and from models.

Class IIIa.

As Class IIIb.

Class II.

Drawing from plaster casts. Copying of landscapes.

Class I.

As Class II.

GEOMETRICAL DRAWING (Voluntary):

Class IIa.

Outlines of simple bodies; sections of these.

Class Ib.

Plane curves, bodies of rotation, and sections of these.

Class Ia.

The point, the straight line, and the plane. Perspective.

ENGLISH (Voluntary):

Lower Division.

Grammar and Reading from Dubislav and Boek's Principia.

Middle Division.

Chambers, History of England. Tennyson, "Enoch Arden."

Upper Division.

Shakespeare, Richard III. Macaulay, Warren Hastings.

HEBREW (Voluntary):

In connection with Kautzsch's Exercises.

Lower Division. Exx. 1–48.

Upper Division.

Revision and completion of grammar. Translation of selected passages from the historical books and psalms.

GYMNASTICS:

In classes according to Director Maul's "Instruction."

HÖHERE MADCHENSCHULE

GERMAN:

Class VII. (Average age 10–11.)

Reader, Holdermann, "Fourth school year." Reading and explanation of approved pieces which are then repeated in the pupil's own words. Repetition, Poetry.
Grammar. Purely simple sentence with such extensions as are caused by the use of the oblique cases. Parts of speech that occur in examples. Declension of noun. Use of the active and passive voice in direct sentences.
Practice in orthography, and short essays.

Class VI. (Average age 11–12.)

Reader. Holdermann, Fifth school year. Practice in giving the substance of pieces read.
Repetition: Poetry.
Grammar. Purely simple sentence, with its extensions and enlargements, and the parts of speech occurring in examples.
Practice in orthography and essay-writing, chiefly in connection with reader.

Class V. (Average age 11–12.)

Reader. Holdermann, used as in Classes VII. and VI.
Repetition: Poetry.
Grammar. The various kinds of principal sentence. Order of words. Combination of sentences with and without contraction (*e.g.*, participial).
Practice in orthography and essay-writing.

Class V. (Average age 12–13.)

Reader. Holdermann, seventh school-year.
Repetition: Poetry.
Grammar. The contracted, co-ordinate, and subordinate sentence. (Contracted, *e.g.*, by use of participles.)
Dictation; Essays.

Class III. (Average age 14–15.)

Reader. Holdermann (eighth school-year).
Walleser's "Poetisches Schatzkästlein." Poems, particularly ballads of Schiller and Goethe.
Repetition of poetry. The elements of prosody.
Essays.

Class II. (Average age 15–16.)

Reading. Homer's Odyssey, the Niebelungenlied, and Hermann und Dorothea in school editions. Wallenstein's death, with introductory treatment of the camp and Piccolomini, and a series of poems from Walleser's "Poetisches Schatzkästlein."
Review of literature of Middle Ages. Selected pieces learned for repetition.
Ten essays, partly done at home, partly in class.

Class I. (Average age 16–17.)

Reading. Klopstock, Oden. Goethe, Poems and Iphigenia. Schiller, Poems, die Huldigung der Künste, die Jungfrau von Orleans. Uhland, Herzog Ernst von Schwaben. Sophokles, Antigone. Walleser, Poetisches Schatzkästlein.
The newer literature in connection with reading.
Practice in declamation.
Ten written tasks (partly done in class).

FRENCH:

Class VII. Division A.

First part of Dr. J. Bierbaum's "French taught according to the direct analytic method."
Written Work. Copies and Dictation.

Division B.

v. Schmitz-Aurbach's "French Course according to the analytic method" (first school-year).
Written work as in Division A.

Class VI. Division A.

Parts I. and II. of Dr. J. Bierbaum's "French taught according to the direct analytic method."

Division B.

v. Schmitz-Aurbach's "French Course according to the analytic method" (second school-year).
Written work in both divisions.

Class V. Division A.

Dr. J. Bierbaum's "French taught according to the direct analytic method" (Part II. to Ex. 49).

Division B.

v. Schmitz-Aurbach's "French course according to the analytic method" (third school-year).
Written work in both divisions.

Class IV. Division A.

Bierbaum "French taught," &c. Part II., from Lesson 20 onwards. Part III., Lessons 1–17. Irregular verbs. Perfect participle.

Division B.

v. Schmitz-Aurbach's "French course," &c. (fourth school-year).
Written work in both divisions.

Class III. Division A.

Bierbaum's "French taught," &c., Part III.

Divisions A and B.

Reading: "Sous la Tonnelle," by Souvestre. "Récits de la vie reélle," by J. Girardin.
The irregular verbs.
Practice in speaking.
Written work.

Class II.

Reading. Malot, "Sans famille." Sandeau, "Mademoiselle de la Seiglière."
Grammar. Use of tenses and moods. Participles. Conversation and Repetition.
Written work.

Class I.

Reading. Scribe et Legouvé, "Bataille de Dames." Molière, "Femmes savantes." Töpfer, "Nouvelles." Selected pieces from other authors (Erckmann-Chatrian, François Coppée, A. de Vigny, V. Hugo.)
Review of French history and literature.
Written work.

ENGLISH:

Class III.

Bierbaum, "English taught according to the direct analytic method," Part I. Practice in speaking.
Written work.

Class II.

Reading. Miss Yonge, "Countess Kate."
Conversation in connection with reading.
Written work. Dictation, translation, retranslation, essays.

Class I.

Reading. Dickens, "A Christmas Carol." Alcott, "Little Women." Mackarness, "Amy's Kitchen." Selected pieces from Byron, Coleridge, Cowper, Macaulay, Scott, Shakespeare, Tennyson.
Review of English literature.
Conversation.
Written work.

HISTORY:

Class VI.

Greek and German legends.

Class V.

Stories from German history up to the "Thirty Years' War." Andrä-Sevin, "Stories from German History."

Class IV.

Andrä-Sevin, "Stories from more recent German History."

Class III.

Ancient history up to the "Fall of the Roman Western Empire," from Löhlein and Holdermann's History.

Class II.

The Middle Ages and the beginning of more modern history, from Löhlein and Holdermann's History.

Class I.

More modern times from Löhlein and Holdermann's History.

MATHEMATICS:

Class VII.

Arithmetic. The four simple rules applied to abstract and concrete numbers. Weights and measures.

Class VI.

Arithmetic. The four simple rules in relation to compound quantities, with practice in oral and written work.

Class V.

Arithmetic. Vulgar and decimal fractions with practice in oral and written work.

Class IV.

Arithmetic. Revision of work in fractions. Simple rule-of-three sums.
Geometry. Lines, angles and areas.

Class III.

Arithmetic. Simple and compound proportion.
Geometry. Calculation of areas.

Class II.

Arithmetic. Work of Class III. revised and supplemented.
Geometry. Theory of angles, triangles, and parallelograms. Superficial area of figures.

Class I.

Arithmetic and Algebra. Work of Class II. revised and supplemented. Stocks. Simple equations.
Geometry. Quadrilateral and polygon. Circle. Superficial area and cubic contents of bodies.

GEOGRAPHY:

Class VII.

The Grand Duchy of Baden, from K. Bürkel's "Handbook of Geography."

Class VI.

The main points concerning the form and surface of the earth, and its five divisions, from A. Hummel's "Foundations of Geographical Knowledge."

Class V.

Europe. Germany, Switzerland, Austria and Hungary from A. Hummel's "Outlines of Geography.

Class IV.

The other European countries, from A. Hummel's "Outlines of Geography."

Class III.

Asia, Africa, Southern Europe.

Class II.

America, Australia, and Germany.

Class I.

Past work revised and supplemented.

STUDY OF NATURE:

Class VII.

Summer. Observation and description of plants.
Winter. Description of specimens of various classes of animals.

Class VI.

Summer. Description of certain flowering plants from the vicinity of the town.
Winter. Description of mammals: (1) native, (2) foreign.

Class V.

Summer. Description of wild flowering plants, as representatives of the most important families of plants.
Winter. Birds, reptiles, amphibious animals, and fishes. Pokorny's Handbook.

Class IV.

Summer. Description and comparison of wild flowering plants from the vicinity of Karlsruhe. The artificial and natural system of plants.
Winter. Invertebrate animals. Pokorny's Handbook.

Class III.

Mineralogy, elucidated where practicable by reference to Fricke's Chemistry.

Class II.

Mechanics. Sound. Fricke's Handbook.

Class I.

Mechanics. Magnetism, Electricity, Heat, Light. Fricke's Handbook.
Revision of work of lower classes.

CALIGRAPHY:

Classes VII., VI., V.

Writing in German and Roman characters.

DRAWING:

Class V.

The straight line and its application to central figures and combinations of figures.

Class IV.

The curved line and its application to central and symmetrical figures. Conventional patterns of leaves and flowers.

Class III.

Drawing and colouring of vessels and surface ornaments according to Wagner-Eyth, Hertle, Kolb, Taubinger, Jakobsthal, &c.

Class II.

Drawing of ornaments from plaster models and plates. Combination of the forms already studied with a view to their practical application in needlework. Practice in designing.

lass I.

Drawing of ornaments from plaster casts, of flowers from nature, and from plates. Perspective. Landscapes.

SINGING:

Class VII.

Training of voice and ear. Notes and keys. One-part songs. Choral singing.

Class VI.

Notes and keys. Practice in one and two-part exercises from the "Karlsruher Liederbuch, VII. and VIII." Two-part songs. Choral singing.

Class V.

One and two-part exercises. Scales of E sharp and A according to the exercises in the "Karlsruher Liederbuch, IX. and X." Two-part songs. Choral singing.

Class IV.

One and two-part exercises from "Karlsruher Liederbuch, X." Two-part songs. Choral singing.

Class III.

Exercises from "Karlsruher Liederbuch, XII." Three-part songs. Choral singing.

Class II.

Choruses of Köllner's "A Spring Morning." Folk-songs. Choral singing.

Class I.

Köllner's "A Spring Morning." "Solos and Choruses." Folk-songs. Choral singing.

DANCING AND DEPORTMENT:

Class II.

Dancing: Steps. Sir Roger de Coverley. Cross Polka. Galop. Rheinländer. Française. Esmeralda. Polka. Polka Mazurka. Lancers.
Deportment: Ebhardt's "Deportment." Carriage, walking, standing, sitting, greeting, behaviour at table, introductions, calls.

Class I.

Work of Class II. revised. Also, Polonaise, Waltz, Française (the newer figures). Tyrolienne. Variétés Parisiennes.

NEEDLEWORK:

Class VII.

Knitting of stockings. Crochet work, various stitches learnt, and applied, with the use of thread of various colours and beads.

Class VI.

Knitting in of heels and patches. An openwork sampler used.
Embroidery: The various stitches practised on canvas strips.

Class V.

Sewing: The various stitches, seams, hems, and gathers; also button-hole work on linen. Sewing on of buttons and hooks.

Class IV.

Cutting out and sewing of chemisettes.
Network: The most important varieties.

Class III.

Mending of linen, twill and damask. Sewing in of patches. Knitting stitches practised, also lace-work stitches upon tulle.

Class II.

Chemise sewing, and learning of various embroidery stitches.

Class I.

Machine sewing.

TYPEWRITING:

(Voluntary) in Class I. System Roller.

GYMNASTICS:

Compulsory up to Class III., voluntary above Class III.
The course includes a system of drill (in all classes) and various gymnastic exercises—barbells, giant-stride swinging on the rings, horizontal bar, horizontal and slanting ladder.
These exercises are varied by suitable games.

STRÖMUNGEN

AUF DEM GEBIET DES SCHUL- UND BILDUNGSWESENS IN DEUTSCHLAND.

VON PROFESSOR DR. W. REIN IN JENA.

INHALT.

A. Zur Lehrerbildung.
1. Beteiligung der Universitäten an der Sache der Erziehung
2. Lehrerbildung für höhere Schulen.
3. Lehrerbildung für Volksschulen.

B. Zur Organisation des Schulwesens.
1. Staat, Kirche, Gemeinde, Familie.
2. Allgemeine Volksschule.
3. Fortbildungsschulen und Fachschulen.
4. Höhere Schulen.

Strömungen auf dem Gebiet des Schul- und Bildungswesens in Deutschland.

von Professor Dr. W. Rein in Jena.

Die Zukunft eines Volkes hängt von der rechten Entwicklung und Stärkung seiner Arbeitskraft ab. Das ist das Kapital, auf dem die wirtschaftliche und politische Selbständigkeit des Volkes beruht. Daher muss die Aufgabe aller, denen das Wohl und der Fortschritt des Volkes am Herzen liegt, darauf gerichtet sein, dieses Nationalkapital zu stärken und zu mehren. Nun sind in ihm ideale und materielle Elemente enthalten, insofern die Arbeitskraft des Volkes sich bethätigt einmal an der Hebung und Kräftigung der Geistesschätze, an Wissenschaft und Kunst, Sittlichkeit und Religion, das andere Mal an der Mehrung und Verbreitung der materiellen Güter, mögen sie der Urproduktion, der Industrie oder dem Handel zugehören. Für letzteres sorgt der Staat durch seine Wirtschaftspolitik, für ersteres durch die Pflege des gesamten Schul- und Bildungswesens.

Sind beide Gebiete äusserlich auch getrennt, so stehen sie doch in einem notwendigen inneren Zusammenhang. Allerdings ist das Verhältnis nicht so, dass die wirtschaftlichen Zustände allein die gesamte menschliche Entwicklung bedingen, dass also, wer für die wirtschaftliche Blüte eines Volkes sorgt, zugleich alle übrigen Interessen mit einschliesst. Das ist der Standpunkt der auf Marx zurückgehenden materialistischen Geschichtsauffassung, die besagt, dass alle geistige Entwicklung in moralischer und intellektueller Hinsicht Ausfluss der jeweiligen wirtschaftlichen Lage sei. Darnach müsste von selbst durch Besserung der wirtschaftlichen Verhältnisse eine Emporhebung der gesamten Gesellschaft erfolgen.

Das Wahre in dieser Anschauung liegt offenbar darin dass allerdings ein tiefer innerer Zusammenhang zwischen den wirtschaftlichen Verhältnissen und den geistig-sittlichen Zuständen besteht, ein Zusammenhang aber, der nicht ein blosses Abhängigkeitsverhältniss des einen vom andern bedeutet, weil Geschichte und Erfahrung dem schnurstracks widersprechen. Ein wirtschaftlich Gebundener braucht kein geistig Gefesselter zu sein; der menschliche Wille kann sich über alle äusseren Hemmnisse und Widerwärtigkeiten hinausheben. Ungünstige ökonomische Verhältnisse können allerdings den geistigen Schwung brechen und thun es sehr oft — aber, umgekehrt, haben dies nicht oft auch die günstigsten gethan? Das alte Rom ist doch hauptsächlich daran gescheitert, dass die religiösen und sittlichen Spannkräfte abnahmen, während der Reichtum eine stete Zunahme erfuhr. Und diese Erfahrung tritt uns auch sehr häufig im Einzelleben entgegen. Die führende Rolle haben also die idealen Mächte in der Hand. Wo sie aus der Hand gegeben werden, sinkt der Wert des Einzellebens herab und die Gesamtheit ist dem Untergang verfallen.

Die Sorge für die materielle Wohlfahrt muss also das rechte Gleichgewicht durch eingehende Pflege der höheren Interessen erhalten. Letztere soll vor allem verhüten, dass das Volk nicht aufgehe in dem Jagen nach Gewinn; dass es bei der Arbeit zur Mehrung der äusseren Güter nie vergessen darf, dass solche Mehrung Hand in Hand gehen müsse mit der Stärkung der inneren Kultur, wenn nicht eine Fäulnis des Volkskörpers um sich greifen soll, die das Verderben früher oder später herbeiführt.

Hierin liegt die Bedeutung der idealen Mächte im Haushalt des Volkes; damit ist auch die Wichtigkeit der Einrichtungen gekennzeichnet, denen die Pflege dieser Seite des Volkslebens anheimgegeben ist: der Kirche und der Schule.

Von diesem Hintergrund hebt sich also die Arbeit des Schul- und Bildungswesens wirksam ab. Sie in rechter Weise aufzunehmen und zu organisieren ist eine wichtige Angelegenheit der Staatskunst, die den Werdegang des Volkes beeinflussen und seine Zukunft in die rechten Bahnen lenken will. Ihr zur Seite steht die Wissenschaft der Erziehung, die Pädagogik, die der Staatskunst sichere Wege zeigen will, auf denen Gesundheit, Kraft und Wirksamkeit der heranwachsenden Generation sich entwickeln und stark zu werden vermag; ferner soll sie den Erziehern Ziel und Wege aufdecken, um die einzelnen ihrer Bestimmung innerhalb des Volksganzen entgegen zu führen.

Wenn also auf der einen Seite die National-Oekonomie Ziele und Wege des Wirtschafts-Lebens aufdecken und regulieren will, so sucht andrerseits die Pädagogik zu zeigen, wie die rationelle Pflege der geistigen Güter in der rechten Beeinflussung der heranwachsenden Generation sich vollziehen soll.

1. *Beteiligung der Universitäten an der Sache der Erziehung.*

Dass die Ausbildung beider Wissenschaften in gesunder, ruhiger Entwicklung, in inniger Verbindung und stetem Wechselverkehr mit dem Volksleben geschehe, dies ist offenbar Sache der Hochschulen, vor allem der Universitäten. Und so richtet sich denn naturgemäss der Blick zuerst auf unsere Universitäten als die höchsten Zentren geistiger Bildung und Arbeitsleistung. Die Frage drängt sich auf, was sie denn für die Ausbildung der pädagogischen Wissenschaft geleistet haben und was sie noch leisten müssen. Bei der Beantwortung dieser Frage drängt sich sofort ein eigentümliches Misverhältnis auf, das zwischen der Entwicklung der National-Ökonomie und der Pädagogik an unseren Universitäten hervortritt. Während erstere eine äusserst eingehende und vielseitige Pflege erfuhr, durch eine Reihe der hervorragendsten Männer: Roscher, Schmoller, Wagner, Brentano, Weber und andere, ist die Pädagogik weit hinter solcher Entwicklung zurückgeblieben. Dies hängt zunächst wohl damit zusammen, dass die grosse Mehrzahl der deutschen Universitäten noch keine selbständigen Lehrstühle für Pädagogik besitzt, während die National-Ökonomie seit langer Zeit an jeder Hochschule selbständiger Sitze sich erfreut.

Den Gründen dieser Erscheinung kann hier nicht nachgegangen

werden. Die Vernachlässigung der pädagogischen Wissenschaft an den meisten deutschen Universitäten steht ausser Zweifel. Es ändert an dieser Thatsache nichts, dass Männer wie Eucken (Jena), Baumann (Göttingen), Jürgen Bona Meyer (Bonn), L. Meyer (Tübingen), Paulsen (Berlin), Schiller (Giessen), Uhlig (Heidelberg), Vogt (Wien), Willmann (Prag), Ziegler (Strassburg) u. a. eifrig und erfolgreich auf diesem Gebiete gearbeitet haben und noch arbeiten. Die nachfolgende Zusammenstellung, die auf Grund einer Übersicht über das Studium der Pädagogik an den Preussischen Universitäten und der Thüringischen Universität Jena entworfen worden ist, spricht deutlich genug.

An sämtlichen Preussischen Universitäten zusammen wurden in den letzten neun Semestern 435 pädagogische Vorlesungen und Übungen in 1217,5 Stunden gehalten; in Jena 68 pädagogische Vorlesungen und Übungen in 158 Wochenstunden. Diese Ziffern ergeben für Jena einen Durchschnitt von 7,6 Vorlesungen in 17,6 Wochenstunden pro Semester, gegenüber 4,4 Vorlesungen in 12,3 Wochenstunden an den Preussischen Universitäten. Dabei zeigt Berlin das Maximum mit durchschnittlich 10,4 Vorlesungen in 27 Wochenstunden, Königsberg das Minimum mit 1,5 Vorlesungen und 5,3 Wochenstunden.

Die Vernachlässigung der pädagogischen Wissenschaft an den deutschen Universitäten ist sehr zu bedauern, im Interesse der Wissenschaft, der Lehrerbildung und der Volksbildung. Fassen wir letztere ins Auge, so unterliegt es doch keinem Zweifel, dass, falls nur darauf Wert gelegt wird, dass die Zentralstätten wissenschaftlicher Forschung enge Fühlung mit den herrschenden Strömungen im Volke unterhalten, auch die Sache der Volkserziehung und Volksbildung in den verschiedenen Schichten den Mittelpunkten des geistigen Lebens nicht fremd bleiben darf. Wo es geschieht, verlieren diese einen Teil des Einflusses: sie stehen ausserhalb der treibenden Mächte und bleiben von diesen unbeachtet. Nicht selten hört man in Deutschland gegen unsere Hochschulen diesen Vorwurf erheben, dass sie sich dem geistigen Leben des Volkes zu sehr entfremdet hätten, dass sie infolge dessen zu geringen Einfluss auf die Entwicklung der Dinge ausübten, da es ihnen doch zukäme, bestimmend in den Werdeprozess des Volkes einzugreifen.

Wieweit dieser Vorwurf gerechtfertigt ist, können wir hier nicht untersuchen. Berechtigt scheint er allerdings inbezug auf das Bildungswesen zu sein. Dies hängt mit der erwähnten Thatsache zusammen, dass die Wissenschaft, der die Untersuchungen über prinzipielle Gestaltung der gesamten Bildungsarbeit eines Volkes obliegen, an unseren Universitäten mit wenig Ausnahmen der selbständigen Vertretung entbehrt. Daher blieben die Bildungsangelegenheiten anderen Stellen überlassen, die zumeist weder Fähigkeit noch Lust besitzen eine prinzipielle Ordnung dieser Fragen herbeizuführen, sondern genötigt sind, zwischen dem Druck der öffentlichen Meinung und dem Hergebrachten zu vermitteln, von Fall zu Fall zu entscheiden, ohne der Wohlthat eines Richtung gebenden, geschlossenen Gedankenkreises sich zu erfreuen.

Es ist daher kein Wunder, wenn unsere Bildungsangelegenheiten in eine Verwirrung geraten sind, die durch die Berliner Dezember-Konferenz (1890) eher vermehrt als vermindert worden ist. Dies hätte nicht geschehen können, wenn von unseren Universitäten aus die Wissenschaft der Pädagogik ein kräftiges Wort hätte sprechen können. Da man aber zur rechten Würdigung der Bildungs- und Erziehungsangelegenheiten an unseren Hochschulen sich vielfach nicht erheben konnte, so rächt sich nun dieser Mangel sehr bitter in dem Volksleben selbst, auf dessen Gestaltung doch unstreitig die Art und Weise der Erziehung und ihrer Organisation einen grossen bestimmenden Einfluss ausübt. Verzichten die Hochschulen, in einer übertriebenen Schätzung fachwissenschaftlicher Spezialstudien verloren, auf diesen Einfluss, so begeben sie sich selbst eines wirksamen Mittels, in die geistige Entwicklung des Volkes einzugreifen.

Neuerdings scheint nun an den Preussischen Universitäten eine Wendung zum Bessern eingetreten zu sein. Das Kultus-Ministerium in Berlin hat zwei selbständige Lehrstühle für Pädagogik an den Universitäten in Halle und in Berlin eingerichtet. Auf ersteren ist der Direktor der Franckischen Stiftungen in Halle, Dr. Fries, auf letzteren Geh. Rat Dr. Münch aus Koblenz berufen worden. Massgebend für die Arbeit dieser Männer aber scheint ein Gutachten zu sein, das der Curator der Universität Halle, Geh. Rat Dr. Schrader, entworfen hat. Es ist abgedruckt in No. 53 "der Lehrproben und Lehrgänge," 1897, Halle a/S. Nach diesem Gutachten soll folgender Plan des Pädagogischen Studiums an den genannten Universitäten eingehalten werden: 1. Geschichte der Pädagogik und des Schulwesens seit dem XV. Jahrhundert; 2–3 Stunden wöchentlich in einem Semester; 2. Zusammenhängende Darstellung der Erziehungs- und Unterrichtslehre; 3–4 Stunden wöchentlich, in einem Semester. Ferner soll der Professor in wöchentlich einstündigen Übungen Musterbilder für die schulmässige Behandlung sowohl einzelner Schriftsteller als zweckmässig gewählter Abschnitte aus der Religion, der Geschichte und der Mathematik vorführen. Mit diesen Übungen kann der Besuch einiger Unterrichtsstunden an einer höheren Schule des Orts verknüpft werden.

II. *Lehrerbildung für höhere Schulen*

Es ist leicht ersichtlich, dass mit diesen Verordnungen nur auf die Ausbildung der Schulamtskandidaten für höhere Schulen, namentlich für die Gymnasien, hingezielt wird. Sicher ein Fortschritt gegenüber dem Nichts, das bisher galt. Aber es ist nur ein Schritt auf dem Weg, der eingeschlagen werden muss. Denn nicht um einseitige Ausbildung einer Gymnasialpädagogik und nicht um einseitige Vorbildung künftiger Gymnasiallehrer handelt es sich an unseren Universitäten, sondern um höhere Dinge, um eine von ethischen und psychologischen Grundlagen ausgehende, vielseitige Erfassung der gesamten Erziehungs- und Bildungs-Probleme, die das Volks-

leben der Gegenwart in seiner Vielgestaltigkeit umfasst. Die Verordnung des Hallenser Curators ist der Ausdruck eines rückwärts gewandten Propheten, darum kann sie nicht befriedigen. Die Wissenschaft der Pädagogik als Ganzes genommen wird wenig Förderung daraus gewinnen; die Förderung liegt allein auf dem Gebiet der Lehrer-Ausbildung.

Seit 1892 werden die Lehrer höherer Schulen in Preussen und einigen anderen deutschen Staaten in sogenannten "Gymnasial-Seminaren" ausgebildet, Anstalten, die mit höheren Schulen verbunden sind. Damit wurde vor allem die praktische Zurüstung ins Auge gefasst; die theoretische sollte von der Universität vorher besorgt werden. Aber bisher war an den Universitäten wenig Gelegenheit dazu gegeben. Nun soll durch die Gründung der Gymnasial-Professuren—so darf man wohl sagen—in Halle und Berlin die Lücke in etwas ausgefüllt werden. Aber an der ganzen Anlage dieser Lehrerbildung bleibt immer der grosse Nachteil haften, dass Theorie und Praxis von einander getrennt sind; erstere der Universität, letztere den Gymnasien überwiesen. Für den tiefer Blickenden erscheint eine solche mechanische Aufteilung der Arbeit so widerspruchsvoll, dass er sie nur als einen Notbehelf ansehen kann.

Ein Blick auf die Lehrer-Seminare für Volks und Mittelschulen kann das Richtige zeigen: die Vereinigung von Theorie und Praxis, ihre gegenseitige Durchdringung und das Hineinführen der jungen Leute in diese Verbindung während der Zeit ihrer Ausbildung. Auch das Pädagogische Universitäts-Seminar zu Jena, das mehr als 50 Jahre thätig ist, hat an dieser Verbindung festgehalten, weil sie allein in der Sache begründet ist. (S. die 7 Hefte Aus dem Päd. Universität-Seminar zu Jena. Langensalza, Beyer u. S.)

In der Ausbildung der Lehrer für höhere Schulen sucht man also gegenwärtig die Kraft der Universitäten wirksam zu machen. Aber ebenso will man dies erstreben auf dem Gebiet der Lehrerbildung für Volksschulen, nur in andrer Weise. Dies führt uns nun zur

III. *Volksschullehrer-Bildung.*

(i.) Während die Veranstaltungen für die pädagogische Ausbildung der Lehrer an höheren Schulen neueren Datums sind—das Probejahr ausgenommen, das schon ein ehrwürdiges Alter besitzt, aber trotzdem nicht geschätzt wurde—so können viele Lehrer-Seminare ihre Gründung weit in das vorige Jahrhundert zurück verfolgen. Es ist daher erklärlich, dass in ihrer Ausgestaltung und Fortbildung im Lauf der Jahrzehnte gute Fortschritte gemacht worden sind; auch im Aeussern, im Bau prächtiger Seminarhäuser kann man dies erkennen. In Preussen war der letzte wichtige Fortschritt in diesen Anstalten 1872 mit den "Falkschen Bestimmungen" gemacht worden. Aber seitdem war ein Stillstand zu bemerken, der in immer steigendem Masse die Kritik herausforderte und zu Reform-Bestrebungen antrieb.

In diesem Punkte war die ganze, mehr als 100,000 Köpfe zählende Lehrerschaft Deutschlands einig. Die Seminarbildung genügt heute nicht mehr, das ist der einstimmige Ruf, den man

durch das ganze Reich hindurch hören kann. Für die nächstjährige* Lehrer-Versammlung in Breslau ist als Hauptthema aufgestellt worden: Welche Forderungen stellt die Gegenwart an die Ausbildung des Lehrers? Und schon jetzt wird diese Frage viel besprochen, in kleineren Versammlungen, sowie in Schriften, unter denen die des Seminar-Directors Dr. Andreä in Kaiserslautern die erste Stelle einnehmen.

Dabei tritt ein scharfer Gegensatz in der Auffassung dieser Dinge hervor, der sich an die Auslegung des Begriffs "Gegenwart" anschliesst. Mit Recht wird gefragt, was denn die "Gegenwart" sei. Wer bestimmt denn was man unter der Gegenwart zu verstehen habe? Die Gegenwart trägt doch kein so einheitliches Gepräge, dass man ohne weiteres ihre Forderungen erkennen und vernehmen kann. Wer will nun sagen, welche von den verschiedenen Strömungen, die sich in der Beeinflussung der Zeitgenossen den Rang abzulaufen suchen, als die herrschende sich durchsetzen werde? So spricht auch auf dem Gebiet der Lehrerbildung die Gegenwart keine einheitliche Sprache. Sie redet auch hier in verschiedenen Zungen. Welche sollen wir hören als die wahre? Wir haben zu wählen zwischen zwei Ansichten, die seit langem schon sich schroff gegenüberstehen, aber heute in besonderer Schärfe sich geltend machen wollen.

Eine Strömung ist gerichtet auf Erhaltung oder Wiederherstellung eines patriarchalisch-despotischen Verhältnisses zwischen Besitzenden und Besitzlosen—Gebildeten und Ungebildeten, und zwar deshalb, weil die Gesellschaft sich glücklich fühle bei solcher Ordnung, die sogar als eine gottgewollte besonders sanktioniert zu werden pflegt. Von diesem Standpunkt aus empfiehlt es sich die Kinder des Volkes nur mit den Utensilien auszurüsten, die der Arbeiter nötig hat um ein brauchbares Werkzeug für alle mechanische Dienstleistung und geschickt für die Gütererzeugung zu sein. Zu dieser Ausrüstung gehört Lesen, Schreiben, Rechnen und Religion, d.h. hier die Predigt von der Ergebenheit in das Schicksal, das dem Armen und Niedrigen auf Erden blüht, unter Vertröstung auf einen Ausgleich im Jenseits.

Von diesem Standpunkt aus ist natürlich für die Lehrerbildung schon viel zu viel geschehen. Denn wer der Volksbildung Stillstand gebieten will, wird natürlich erst recht der Bildung der Volkslehrer Einhalt thun wollen, damit keine Gefahr entstehe, dass die Volksbildung über das gewünschte Mass hinausgehoben werde.

Aus diesem Boden ist der Vorschlag erwachsen, gediente Unteroffiziere als Volksschullehrer einzustellen. Unter Friedrich d. Gr. mochte dies dem Stand der damaligen Dinge gegenüber als ein Fortschritt erscheinen. Dass aber in unserer Zeit selbst ein Mann wie Treitschke das Fridericianische System empfehlen konnte, beweist nur eine grosse Unkenntnis der Bildungs-Bedürfnisse der breiteren Volksschichten und eine grosse Unkenntnis unserer Lehrer-Seminare. Neuerdings ist der Gedanke von einem Berliner Dozenten aus der Juristischen

* Prof. Rein wrote this article in November, 1897. The conference above referred to was held at Breslau between May 30th and June 3rd, 1898.

Fakultät wieder aufgenommen, aber auch einstimmig als nicht diskutierbar abgewiesen worden.*

Eine zweite Strömung geht von der Erfahrung aus, dass eine künstliche Zurückstauung der Volksbildung ein Ding der Unmöglichkeit ist. Nach der Einführung der obligatorischen Schulpflicht, der allgemeinen Dienstpflicht und des allgemeinen Wahlrechts grenzt es an Vermessenheit dem aufsteigenden Prozess der Volksbildung ein Halt zurufen zu wollen. Aber es wäre auch durchaus unchristlich. Das Christentum hat den Wert jeder einzelnen Menschenseele hochgehoben—ein ungeheurer Fortschritt. Früher der Mensch eine Ware wie jede andere, heute eine freie Persönlichkeit, deren selbständige Ausbildung innerhalb des gesellschaftlichen Ganzen gewährleistet ist. Kein Herrschergebot, und wäre es auch das mächtigste kann die Idee von der Freiheit des Christenmenschen vernichten. Hier scheitert Menschensatzung. Zur Freiheit gehört aber vor allem die innere Ausrüstung der Persönlichkeit. Eine weise Staatskunst wird daher das im Volk liegende Bildungsbedürfnis, das mit gleicher Notwendigkeit nach Befriedigung drängt, wie das Nahrungsbedürfnis, in die rechten Bahnen lenken und in behutsamen Fortschritt die aufsteigende Linie innehalten.

Mit diesem Fortgang der Bildung des Volkes hat nun die Lehrerbildung Schritt zu halten, und zwar so, dass sie nicht etwa der Volksbildung mühsam nachhinkt, sondern so, dass sie vorangeht. Allerdings nicht soweit, dass die Fühlung mit dem Volke verloren geht; denn sonst versagt die Führung. Dies geschieht aber wenn die Lehrerbildung so weit überspannt wird, dass man die Ausbildung des Lehrers durch die Universität fordert. Hier haben wir das zweite Extrem, das die Gegenwart einschliesst. Es stehen sich gegenüber: Unteroffizier-Ausrüstung und Universitäts-Bildung. Das eine schaut rückwärts—in eine Vergangenheit, die weit ab von der Gegenwart liegt, das andere vorwärts; aber in eine Zukunft, die in unabsehbarer Ferne vor uns schwebt. Möglich dass die Entwicklung einst dahin führt dass alle Jugendbildner aus derselben Quelle, der Hochschule, ihre Bildung holen; wir aber müssen, um jetzt zu wirken, auf dem Boden der Gegenwart stehen. Damit ist unser Standpunkt gekennzeichnet. Er beruht auf der Gegenwart; er knüpft an das an, was die Gegenwart bietet und will die Fäden behutsam weiter spinnen, die in der Vergangenheit geknüpft, zur Gegenwart heranreichen und nun weiter fortgeführt werden sollen. Ein gesunder Fortschritt geht niemals sprungweise, sondern kettenweise.

Die Gegenwart zeigt nun offenbar eine grosse Steigerung der Lebensführung in den unteren und mittleren Schichten und damit zusammenhängend ein gesteigertes Bildungsbedürfnis, wie es auch deutlich in der starken Benützung der öffentlichen Volksbüchereien, der Vortragskurse in den Volkshochschulen hervortritt, die z. B. in Wien, Jena, Leipzig, München und

* *Von Massow* (Reform oder Revolution) vertritt S. 88-89 ebenfalls diesen Vorschlag, allerdings mit besonderen Modifikationen. Vergl. Zeitschrift f. Philos. u. Pad. 3 Bd. S. 431 ff.

anderwärts ins Leben gerufen worden sind. Um diesem Bedürfnis gerecht zu werden, um es in die rechten Bahnen zu führen, um es vor allem vor Verflachung in die Breite zu bewahren, dazu bedarf es einer tüchtigen Bildung der Führer und Erzieher des Volks. Zu ihnen gehören die Volksschullehrer. Es fragt sich, ob sie zu dem Amt eines Volkserziehers tüchtig ausgerüstet seien, um den zweifellos erhöhten Anforderungen der Gegenwart zu genügen. Diese Frage muss verneint werden.

(ii.) Dabei leitet uns der Gedanke, dass der Fortschritt in einer erhöhten und vertieften Lehrerbildung nicht mit Rücksicht auf die Lehrer, sondern mit Rücksicht auf unser Volk gefordert werden muss. Wer nur den Lehrerstand im Auge hat, wird sich kaum vor übertriebenen Wünschen frei halten können. Im dem Streben den Lehrer auf die höchste dem Menschen nur erreichbare Warte hinauf zu heben, verliert man den Boden unter den Füssen. Deshalb fragen wir, was verlangt die Gegenwart, d. h. unsere jetzige nationale Gesellschaft, unsere jetzige Volks—und Fortbildungsschule vom Lehrer, wie muss die Lehrerbildung eingerichtet werden, damit die Volksbildung in rechter Weise fortgeführt werden kann? Ziel für diese darf aber nicht bloss eine Ausrüstung für die ein—oder mehr—klassige Volksschule sein, sondern das Ziel ist höher zu stecken Der Lehrer soll mit freiem Blick das ganze Gebiet der Bildung und Erziehung überschauen können, um zur rechten Schätzung seiner Arbeit zu gelangen; er soll sowohl von Überhebung wie von Engherzigkeit frei bleiben. Dabei muss vor allem das Seminar ein tiefes, nachhaltiges Interesse für die Sache der Volkserziehung wach rufen. Das ist mehr wert als blosses Vollstopfen mit Wissen und einseitiges Fertigmachen für den Kleindienst. Letzteres darf ja in keinem Fall fehlen, aber es muss getragen sein von einer stillen tiefgehenden Begeisterung für die Erziehungsaufgaben, die in den breiteren Schichten unseres Volks zu lösen sind.

Dazu gehört etwas mehr als Kenntnis der speziellen Didaktik. Um die Geister hell und froh zu machen und höher zu stimmen, muss vor allem eine eingehende Beschäftigung mit den prinzipiellen Grundlagen der Erziehungswissenschaft im Seminar verlangt werden, mit Psychologie und Ethik. Innerhalb der Psychologie aber würde es sich darum handeln die Errungenschaften der neueren Psychologie und der Kinder-Psychologie zu verwerten—selbstverständlich in einem Lehrverfahren, das durchaus induktiv vorschreitet. Ferner wäre das System der Pädagogik, die allgemeine und die besondere Didaktik eingehend zu berücksichtigen, während die Geschichte der Pädagogik d. h. die Lektüre der pädagogischen Klassiker dem Privatstudium überlassen werden kann. Nehmen wir dann noch die Einrichtungen hinzu, die für die praktische Ausrüstung erforderlich sind: Beschäftigung in der Übungsschule, Kritik und Konferenzen, so ist damit der Umkreis der pädagogischen Ausbildung umschrieben, die als Hauptaufgabe des pädagogischen Fachseminars hingestellt werden muss. Als Nebenaufgabe aber tritt, wie bemerkt, die Fortbildung in den Fächern auf, die der allgemeinen Bildung dienen, eine Fortsetzung der wissenschaft-

lichen Studien, allerdings nicht in streng schulmässigem Betrieb, sondern in freierer Weise, d. h. im Wechsel von Vortrag des Lehrers und Referat des Schülers, in der Gelegenheit zu selbständiger Arbeit und Beschäftigung in den naturwissenschaftlichen Fächern, u. s. w. Hier möge die Seminar-Arbeit erinnern an die freie Bethätigung, wie sie an der Universität im Hören von Vorlesungen und in der Seminararbeit sich kundgiebt.

(iii.) Eine solche Organisation des Fachseminars, wie sie mir vorschwebt, setzt nun allerdings eine andere Vorbildung voraus, als sie bis jetzt gegeben werden konnte.

Um die Lehrerseminare in ihrer Arbeit zu heben und zu vertiefen, müssen die ins Seminar Eintretenden viel gründlicher vorgebildet sein als es bisher geschehen ist.

So richtet sich all unser Hauptaugenmerk auf die Vorbildung zum Seminar. Dazu wird man auch genötigt durch den Blick auf die Ausbildung der Lehrer für die höheren Lehranstalten.

Dort eine ausgezeichnete Allgemeinbildung—aber eine mangelhafte philosophisch-pädagogische Ausrüstung—wenigstens bis zum Jahr 1892.

Hier eine bessere pädagogische Bildung wenigstens in technischer Hinsicht—aber eine zurückgebliebene allgemeine Bildung, zurückgeblieben schon deshalb, weil in dem Lehrgang vielfach noch die Erlernung einer Fremdsprache fehlt.

Während also dort der Nachdruck auf die pädagogische, muss hier der Schwerpunkt jetzt in die allgemeine Bildung gelegt werden. Dies muss verlangt werden im Interesse der Wirksamkeit jedes einzelnen Lehrers, im Interesse seiner individuellen Ausbildung. Aber es muss auch verlangt werden im Hinblick auf die soziale Schätzung des Lehrerstandes. Die Einschätzung eines Standes pflegt sich i. a. nach der Höhe und Tiefe der Allgemeinbildung zu richten, die die Glieder eines Standes sich aneignen. Weil nun bisher dieser Teil der Ausbildung im Lehrerstand ohne Zweifel bedeutende Lücken aufwies, musste auch die Wertung des Standes eine so geringe sein, wenn auch dem einzelnen Lehrer gegenüber, der durch Treue, Gewissenhaftigkeit und Tüchtigkeit im Amt fest in sich ruht, solche Geringschätzung sich nicht fühlbar macht, oder nicht merklich beunruhigen kann.

Allerdings geht die Geringschätzung häufig viel weiter, als sie berechtigt ist. Das hängt zusammen mit der Unkenntniss des Lehrerbildungsganges. So verbesserungsbedürftig er auch sein mag, er ist doch weit besser als sein Ruf. Denn wer kennt im grossen Publikum die fleissige, stille Arbeit der Seminare; ja unter den Lehrern der mittleren und höheren Anstalten wer kümmert sich um sie und weiss sie zu schätzen?

Diese Unkenntniss braucht niemand zu wundern, wenn man bedenkt, dass die Lehrerbildung vom 14 Lebensjahr ab eine von den übrigen bekannten Bildungstätten des Volkes vollständig losgelöste ist. Hier sitzt offenbar ein Grundfehler im Bildungsgang unserer Lehrer. Es ist schlechterdings nicht einzusehen, warum für den künftigen Volksschullehrer ein so von allen übrigen namentlich von dem der Lehrer für höhere Schulen

abweichender Bildungsgang notwendig ist. In der Sache begründet ist er keinesfalls. Oder sollte er etwa durch die Berücksichtigung des musikalischen Unterrichts gefordert werden? Das hiesse diesem eine Bedeutung beilegen, die er in der That nicht beanspruchen kann. Überdies kann Klavierunterricht sehr wohl privatim betrieben werden, soweit er für den Eintritt ins Seminar notwendig ist.

Also begründet ist die Isolirung des Lehrerbildungsweges in der Sache nicht. Die Abnormität ist nur historisch zu begreifen, insofern man mit der Gründung von Lehrerseminaren den Anfang machte, die Sache also bei dem Kopf anfing. Erst als man merkte dass zu einem Kopf doch auch ein Unterbau gehört, der ihn zu tragen hat, fing man an besondere Vorbereitungsanstalten ins Leben zu rufen, die die notwendige Vorbereitung liefern sollten. Dass dies oft von Seminarlehrern geschah, ist nicht verwunderlich; merkten sie doch am allermeisten am eigenen Leibe, was für Mühe schlecht vorbereitete Seminaraspiranten zu machen pflegen. Und dass der Staat sich das ruhig gefallen liess, dass andere für ihn in die vorhandene Lücke einsprangen, ist ebenfalls nicht zu verwundern bei der Sparsamkeit, die bei uns für gewisse Dinge vorherrschend ist. Nur die mittleren und kleineren Staaten gingen auch hierin voran, indem sie die Privatpräparandien übernahmen und hie und da mit dem Seminar verschmolzen. (Sächsisches System.)

(iv.) Wenn dies nun auch gegenüber den früheren ungeordneten Zuständen ein Fortschritt genannt werden muss, so ist diese Entwicklung der Sache doch zu bedauern, weil damit die Lehrerbildung von der der übrigen Stände losgelöst wurde. Zugleich wurde eine Verfrühung der Berufswahl und eine gewisse Einengung des Gesichtskreises eingeführt, wie man sie vom Lehrerstand gern fernhalten möche. Wir haben hierfür meines Wissens nur ein Beispiel in der Ausbildung der künftigen Offiziere, die durch die Kadetten-Anstalten hindurch gehen. Ob dies für die militärische Ausbildung einen Vorzug bedeutet, wage ich nicht zu entscheiden; aber das weiss ich bestimmt, dass für die Lehrerbildung die frühzeitige Abschliessung von grossem Nachteil ist, weil damit eine gewisse Abtrennung von den Volkskreisen verbunden ist, mit denen später der Lehrer vielfach zusammen lebt, und die Gefahr einer gewissen Dressur ad hoc zu nahe liegt.

Als normale Einrichtung möchte ich daher die betrachten, die den jungen Mann mit anderen seines Gleichen zusammen aufwachsen, arbeiten und streben lässt bis dahin, wo die Zeit für die Berufswahl gekommen ist und die Austeilung der Jugend in die verschiedenen Fachschulen erfolgen muss.

Den nächsten Fortschritt sehe ich also darin, dass man als Vorbereitungsanstalt für das Seminar eine der höheren Schulen bestimmt, dadurch wird dem bisherigen Gang das Exclusive genommen. Aber welche der höheren Schulen soll gewählt werden? Will man an das Bestehende anknüpfen und nicht in die Luft bauen, so kann m. E. nur die Realschule für jetzt in Betracht kommen. Spätere Zeiten mögen bei stetem Kultur-

fortschritt der Gesamtheit die Ober-Realschule wählen. Für jetzt aber dürfte diese Forderung, namentlich mit Rücksicht auf die Besoldungsverhältnisse, die doch auch nur schrittweise aufgebessert zu werden pflegen, eine arge Überspannung bedeuten. Dagegen ist die Forderung des Besuchs einer Realschule schon jetzt durchführbar und würde offenbar eine grosse Förderung in Lehrerbildung bedeuten. Die Realschule, lateinlos, bietet Alles, was wir als Grundlage für die Seminarbildung jetzt wünschen können. Auf höchste Bildung verzichtend, führt sie doch in die gegenwärtige Kultur ein.

Die Realschulen selbst aber, die in Preussen gegenwärtig nur etwa 1,000 Schüler jährlich entlassen, während die Preussischen Seminare jahrlich etwa 3,300 Präparanden brauchen, würden an Lebensfähigkeit bedeutend gewinnen, die jetzt leider durch die unglückselige Einrichtung die mit den Berechtigungen unserer höheren Schulen verknüpft ist, unterbunden ist.

Ferner ist unsere Forderung auch überall leicht durchführbar, wo das Preussische System gilt. Hier ist die Lehrerbildung noch beweglich. Hier kann die bestehende Realschule als Vorbereitungsanstalt für das Seminar bestimmt, und die bestehenden Präparandenschulen in Realschulen umgewandelt und so allen denen geöffnet werden, die eine über die Volksschule hinausgehende Bildung sich zu erwerben wünschen ohne Lehrer werden zu wollen.

Viel schwieriger liegt die Sache da, wo das sechsklassige Seminar als eine grosse in sich geschlossene Anstalt organisatorisch festgelegt ist. Ich habe diese Organisation wohl historisch begreiflich, aber niemals als Ideal betrachten können, weil die Notwendigkeit der Trennung der Allgemeinbildung von der Fachbildung die jetzt wohl unbestritten sein dürfte, auch eine äussere Trennung in zwei verschiedene Anstalten fordert. Es kann gewiss auch im sechsklassigen Seminar Unter- und Oberbau gut geschieden werden, aber doch bringt die Vereinigung aller Jahrgänge in einer Anstalt verschiedene Misshelligkeiten mit sich, die bei einer Trennung besser vermieden werden können. Ich hebe folgende besonders hervor:—(1) Ohne Zweifel begünstigen kleinere Schul-Systeme die Einheitlichkeit im Lehrer-Kollegium, die gegenseitige Durchdringung der einzelnen Glieder, die Geschlossenheit der Arbeit. Der Einfluss der Erzieher wird im kleineren Kreis gesteigert, weil in engerem Kreis innigere Beziehungen zwischen Lehrer und Schüler sich leichter anbahnen.

(2) Vor allem wird es im Interesse des Seminardirektors liegen, dass er nur das Fachseminar leitet. Seine Aufgabe besteht doch in der pädagogischen Ausbildung und in der Beeinflussung der Characterbildung der angehenden Lehrer. Damit hat er vollauf zu thun. Wird seine Herrschaft weiter ausgedehnt, so muss seine Arbeit an Intensität verlieren, was sie an Extension gewonnen. Je grösser das Schulsystem ist, über das er gebietet, um so äusserlicher wird seine Thätigkeit, um so mehr Schreibwerk —die Klage aller Direktoren—stellt sich ein.

(3) Weiter dürfte hervorzuheben sein, dass doch innerhalb des sechsklassigen Seminars eine sehr verschiedene disziplinarisch erziehliche Behandlung der Zöglinge stattfinden muss. Dass sie

nergestellt und durchgeführt werden kann, soll nicht bestritten werden. Aber es ist jedenfalls hier viel schwieriger, die Grenzen zwischen Gebundenheit und Freiheit der jüngeren und älteren Glieder, die doch alle einem Organismus angehören, immer mit der nötigen Feinheit aufrecht zu halten und den rechten Übergang der jungen Leute in das Amt zu vermitteln.

(4) Endlich möchte ich noch darauf hinweisen, dass ein äusserer Einschnitt in dem gesamten Bildungsgang von unleugbaren Vorteilen ist. Und die Entwicklung im Bildungsgang unserer höheren Berufsstände bestätigt dies auch. Dort sehen wir folgende Parallelen :—

	Erziehungsschule :	Gymnasium.	Fachschule :	Universität :
	,,	Ober-Realschule.	,,	Politechnikum.
Es würde sich anreihen nach unserem Vorschlag	,,	Realschule.	,,	Lehrerseminar.

Auf diesem Wege, denke ich, käme die Lehrerbildungssache in die rechte Reihe. Die sechsklassigen Anstalten, die eine Ausnahme verewigen, haben nur einen Vorteil: Sie sind weniger kostspielig, weil ein Organismus billiger ist als zwei. Aber darf der Geldpunkt hier Ausschlag gebend sein? Überall da also, wo die Trennung von Vorbereitungsanstalt und Seminar festgehalten wird, kann die Organisation verwirklicht werden, die auf Grund obiger Parallele für die richtige gehalten werden muss. Der Fortschritt würde einmal bestehen in einer gründlicheren umfassenderen, gemeinsamen Vorbildung und in Folge dessen in einer besseren fachmännischen Ausrüstung im Seminar.

(v.) Der letzte Wunsch, der sich auf die Bildung der Volksschullehrer bezieht, betrifft ihre Fortbildung. Bekanntlich haben die Lehrer sie selbst nachdrücklich in die Hand genommen, wohl fühlend, welche Lücken ihre Vorbildung ihnen gelassen. Einzeln, im freien Zusammenschluss, in den amtlichen Bezirks-Konferenzen, in der Gründung von Lesekränzchen und Bibliotheken hat sich das Bedürfniss nach Fortbildung Bahn gebrochen. Auch die Universitäten haben ihnen ihre Pforten geöffnet. So ist bekanntlich durch eine Ministerial-Verordnung im Königreich Sachsen vom 1 Juni 1865 und vom 3 November 1874 der Besuch der Universität Leipzig unter gewissen Einschränkungen gestattet worden. Der Abschluss der Universitäts-Studien aber kann nach zweijährigem Studium durch ein pädagogisches Examen bewirkt werden. Auch im Grossherzogtum Sachsen ist die Universität Jena mit ihrem pädagogischen Seminar seit vielen Jahren strebsamen Volksschullehrern zugängig gewesen. Und dies alles gewiss zum grossen Vorteil des Volks-und Mittelschulwesens in diesen Ländern. Nach ihrem Vorgang sollten auch die übrigen deutschen Universitäten Einrichtungen treffen, die der Fortbildung der Volksschullehrer hilfreiche Unterstützung gewähren könnten. Damit wird der Ausbildung und der Laufbahn der Lehrer eine gleich gute Aussicht eröffnet, und diese muss ein Stand haben, wenn er nicht von Unzufriedenheit innerlich zerfressen werden, wenn er nicht Einbusse an seiner Schaffenslust erleiden soll. Aber ebenso notwendig braucht

unser Schulwesen tüchtig vorbereitete und gut ausgebildete Leute für unsere Lehrer-Seminare, Bürgerschul-Rektorate, Schulinspektionen u.s.w. Auf solche Weise kann die Hochschule wirksam in die Förderung des Volksschulwesens mit eingreifen, während sie, wie es zuweilen verlangt wird, die Ausbildung der Volksschullehrer von sich weisen muss, schon aus rein praktischen Gründen. Was jetzt nahe an 200 Lehrerbildungsanstalten im Reiche leisten, sollen unsere 21 Hochschulen vollbringen. Das ist unmöglich. Bleiben wir auf dem Boden der Wirklichkeit, so ist die Einrichtung der Fortbildung an unseren Universitäten durchaus erwünscht, ihre Durchführbarkeit durch die langjährigen Erfahrungen in Leipzig und Jena erwiesen. Hier kann also der Hebel angesetzt werden. Möchte vor allem Preussen nachholen, was es so lange versäumt hat! Ein Anfang ist soeben gemacht worden in der Gründung pädagogischer Professuren an der Universität in Halle und Berlin, freilich zunächst nur für die Zwecke des Gymnasialunterrichts, wie ich oben gezeigt habe. Aus diesen Anfängen muss sich aber mit der Zeit eine höhere und weitere Auffassung von der Thätigkeit dieser pädagogischen Zentralstellen entwickeln; denn man kann den Blick nicht künstlich einengen auf die Erziehung der oberen Schichten, wenn man die Erziehung des Volkes als etwas Ganzes fasst.

Die vorgetragenen Gedanken lassen sich nun in folgende fünf Leitsätze zusammen drängen:—

1. Volksbildung und Lehrerbildung stehen in einem notwendigen inneren Zusammenhang. Die Erkenntnis dieses Zusammenhangs bewahrt einerseits davor die Lehrerbildung zurückschrauben, andrerseits in sprungweisem Fortschritt überspannen zu wollen.
2. In engem Anschluss an die bisherige Entwickelung sehen wir eine besonnene Weiterbildung in der ersten Forderung darin, dass der Charakter des Lehrerseminars als einer Fachbildungsanstalt schärfer hervortreten muss, als es bisher geschehen ist, sowohl im Lehrplan wie im Schulleben.
3. Dies setzt voraus, dass die Allgemeinbildung, die wie überall, so auch hier, der Berufsbildung vorauszugehen hat, breiter und tiefer angelegt wird als es bis jetzt der Fall war. Hier ist also zunächst der Hebel anzusetzen; hier liegt die dringendste Forderung der Gegenwart vor.
4. Demgemäss muss in dem Preussischen System die unzureichende Präparandenbildung beseitigt und dafür die Absolvierung einer Realschule gefordert werden. Wo aber das sechsklassige Seminar als Lehrerbildungsanstalt eingerichtet ist (Sächsisches System) macht sich, soweit dies nicht schon geschehen ist, die Einführung einer fremden Sprache, und zwar entweder der französischen oder der englischen, nötig.
5. Zur Fortbildung des Lehrerstandes möge die Universität geöffnet werden, wie dies im Königreich Sachsen und im Grossherzogtum Sachsen seit langer Zeit der Fall ist.

In Übereinstimmung mit diesen Sätzen nahmen die Abgeord-

neten des national-sozialen Vereins zu Erfurt (September 1897) folgende Sätze an:

I. Wir fordern für den Stand der Volksschullehrer und Volksschullehrerinnen:

1. Für ihr Streben eine bessere Ausbildung, d. h. Vorbildung auf einer höheren Schule, Ausbildung in einer Fachschule, Gelegenheit zur Fortbildung auf der Universität. (Errichtung pädagog. Universitäts-Seminare mit Übungsschulen.)
2. Für ihr Wirken, (*a*) fachkundige Führung, d. h. vor allem Beseitigung jeder technischen Aufsicht durch Glieder irgend eines anderen Standes, Fachaufsicht von den unteren bis zu den obersten Instanzen, (*b*) Sitz und Stimme im Schulvorstande auf Grund freier Wahl.
3. Für ihr Leben ausreichendes Einkommen und rechte soziale Stellung, d. h. finanzielle und soziale Gleichstellung mit den mittleren Staatsbeamten.

II. Für den Stand der Lehrer höherer Schulen verlangen wir die Durchführung der finanziellen und sozialen Gleichstellung mit dem Richterstand.

B. Organisationsfrage des Schulwesens

I.—*Staat, Kirche, Gemeinde, Familien.*

Eine tüchtige Lehrerbildung bildet die Gewähr für eine tüchtige Volkserziehung. Letztere wird allgemein betrachtet als eine notwendige Voraussetzung für nationale Kraft und Wohlfahrt und in unsern Zeiten vor allem auch als ein wesentliches Mittel zur Herstellung des sozialen Friedens. Beides liegt uns am Herzen: Nationale Stärkung und soziale Gesundung. Deshalb wird die Frage häufig aufgeworfen und besprochen: Was kann durch die öffentliche Erziehung geleistet werden um das Volk national und wirtschaftlich zu heben, und was kann sie dazu beitragen soziale Missstände zu beseitigen.

Allgemein wird anerkannt, dass unser öffentliches Schulwesen seit den Freiheitskriegen bestrebt gewesen ist, Liebe und Begeisterung für den vaterländischen Boden, für die vaterländische Geschichte und Entwickelung in die Herzen der Jugend zu pflanzen. Ferner wird anerkannt, dass unser Fachbildungswesen für die verschiedenen wirtschaftlichen Arbeitszweige eine hohe Stufe der Vervollkommnung im Dienste der Technik und der Industrie erreicht hat und rastlos bemüht ist, weitere Stufen der Vervollkommnung zu erklimmen.

Anders liegt die Sache auf der *sozialen* Seite.

Mit dem wirtschaftlichen Leben hat, wie wir sagten, die Schul vortrefflich Schritt gehalten. Aber hat sie auch Schritt gehalten mit den Veränderungen, die das soziale Leben im Laufe des Jahrhunderts hervorgerufen hat? Diese Frage hat nicht nur unter den Schulmännern eine lebhafte Bewegung hervorgerufen, die unter dem Namen der Schulreform ihre Wellen bis in die höchsten Regionen hinein schlug, sondern die politischen Parteien griffen sämmtlich bestimmte Punkte aus den Forderungen heraus, die ihren Anschauungen besonders zusagten. Daraus entstanden

Schulprogramme, ausserordentlich verschieden, widerspiegelnd die auseinandergehenden Weltanschauungen und sich gegenseitig bekämpfend. Während die Anhänger der katholischen Kirche die Schule als ein Ecclesiasticum betrachten und sie dem Staate entreissen möchten, steht die Mehrzahl des Volkes auf der Seite derer, die die Schule als ein Politicum ansehen. Damit soll allerdings nicht eine Alleinherrschaft des Staates auf diesem Gebiet vertreten werden, weil sie nur zu leicht zu einer bureaukratischen Behandlung der Erziehungsangelegenheiten ausartet, die diese durchaus nicht vertragen können. Alle geistigen Angelegenheiten verlangen eine gewisse Freiheit der Bewegung, wenn sie gedeihen sollen. Jede Anordnung, die hier gegeben wird, muss auf innere Zustimmung und Beteiligung rechnen, wenn sie wirksam werden und nicht bloss auf dem Papier bleiben soll. Die Mitarbeit der beteiligten Interessenten sichert am besten ein gesundes Leben und einen gesicherten Fortschritt. Zu den Interessenten nun, die hier in Betracht kommen, gehören, *Staat* und *Gemeinde*, die beide tüchtige Bürger und Bürgerinnen erzogen haben wollen, die *Kirche*, die an der religiösen Erziehung der Jugend ein starkes Interesse besitzt, und die *Familie*, der die Kinder in erster Linie zugehören, die auch am stärksten es empfindet, ob sie geraten oder missraten, die damit das ursprünglichste und natürlichste Recht auf Erziehung in Anspruch nehmen kann.

So unbestritten dies ist, so hat die historische Entwickelung bei uns im allgemeinen sich doch so vollzogen, dass der *Staat* immer mehr die Angelegenheiten der öffentlichen Erziehung an sich nahm und den Einfluss der Familien damit zurückdrängte, so dass man mit Recht von einer weitgehenden Zentralisation mit Hilfe der Bureaukratie sprechen kann. Gemeinde und Kirche wurden zwar zur Mitarbeit herangezogen, die erstere zur Besorgung äusserer Angelegenheiten (Schulbau) und zur Übernahme mancherlei Schullasten, die letztere in weitgehender Weise zur Ersparung von Schulaufsichtsbeamten und zur Beeinflussung der Jugenderziehung in kirchlichem Sinne. Die geistliche Schulaufsicht ist nun zwar in den kleineren Staaten vielfach aufgehoben worden, in Preussen aber dauert dieser Zustand noch fort, ein Zustand, der vielfach die Entwickelung der Schule gehemmt und eine nicht geringe Abneigung zwischen Kirche und Schule, zwischen Geistlichen und Lehrern hervorgerufen und fortdauernd verschärft hat.

Eine *vernünftige* Schulorganisation, die auf soziale *Versöhnung* hin angelegt sein muss, wird also in erster Linie auf einer gerechten Erwägung der Ansprüche gegründet sein müssen, die die einzelnen Schulinteressenten erheben können.

Dies läuft im wesentlichen auf eine gesunde *Dezentralisation* hinaus, wie sie in den kleineren deutschen Staaten bereits in günstiger Weise eingeführt worden ist und in einigen Punkten noch weitergeführt werden kann. Somit bringen wir das Prinzip der *Selbstverwaltung* auch auf dem Gebiet des Schulwesens zur Geltung. Danach werden, um nur die äussersten

Umrisse anzudeuten, im *Schulvorstand* die Vertreter der Familien eines bestimmten Schulbezirks oder einer Schulgemeinde vereinigt; aus Vertretern der Schulvorstände aber wird die *Schulsynode* gebildet. Auf solche Weise wird dem Familien-Prinzip Rechnung getragen, unser öffentliches Schulwesen durch diese Mitwirkung der Familienvertretungen in der That zu einer gemeinsamen öffentlichen Angelegenheit erhoben, wird damit den Gefahren einer oft einseitigen Bureaukratie entzogen. In enger Berührung mit dem Leben wird es selbst an Leben gewinnen. Mit der Anerkennung der Familien-Rechte wird aber nicht nur das Prinzip der *Selbstverwaltung*, sondern auch das Prinzip der *Gewissensfreiheit* hoch gehoben. Der Kampf der politischen und religiösen Parteien um die Schule wird aufhören, wenn den *Familien* die *Entscheidung* darüber zugeschoben wird, in welchem Geiste die Erziehung ihrer Kinder erfolgen, welchen religiösen Charakter vor allem die Schulerziehung tragen soll. Wir müssen von unserem Standpunkt aus jeden Zwang in religiösen Dingen zurückweisen, also auch jeden Zwang seitens der Staatsgewalt inbezug auf die religiöse Jugenderziehung. Ein solcher Zwang wird aber thatsächlich ausgeübt, wenn einesteils die Konfessionschule als die massgebende, andrerseits die Simultanschule als die allein richtige Form der Staatsschule offiziell durchgesetzt wird. Vielmehr können hierüber im Geiste evangelischer Freiheit nur die *Familien* selbst entscheiden. Sie haben zu bestimmen:

1. Ob sie ihre Kinder in Konfessionsschulen oder
2. In Simultanschulen

erziehen und unterrichten lassen wollen. Ebenso muss den Dissidenten das Recht zugestanden werden zur Gründung von Schulen sich zu vereinigen. Das Familienprinzip bedeutet also Freiheit; Gewissensfreiheit und Selbständigkeit in der Verwaltung der Schule. Auf andre Weise kommen wir nicht zu einem gerechten und friedlichen Ausgleich in unserer öffentlichen Schulerziehung. Dem wird nun nicht selten entgegen gehalten, dass die Familien zu einer solchen Heranziehung noch nicht reif seien, ja dass sie selbst ihre Mitwirkung ablehnten, in dem Bewusstsein, dass die Schulangelegenheiten bisher von Staatswegen in vortrefflicher Weise besorgt worden seien. Sie verhalten sich dem Gedanken der Mitarbeit ganz gleichgültig gegenüber, indem sie sagen, die Beamten seien ja dazu da, diese besorgten die nötigen Sachen schon. Sie selbst aber möchten am liebsten aus dem Spiel bleiben. Das ist der Standpunkt des Indifferentismus, der sich namentlich da geltend machen wird wo keine konfessionellen Gegensätze spielen, und ein tüchtiges Beamtentum sich die Hebung des Schulwesens angelegen sein lässt. Dass ein solcher Indifferentismus der Familien aber in wichtigen Dingen der Lebensführung nicht als Ideal, nicht als ein fortzuschleppender Zustand beachtet werden darf, ist doch gewiss klar. Darum gilt es, die *Gewissen* zu wecken und auf die Aufgaben hinzuweisen, die jeder selbstbewusste, thatkräftige Bürger in Sachen der Existenz auf sich nehmen muss, die Pflichten klar zu machen, die er hier zu erfüllen hat.

Ein andrer Einwand stellt sich auf den Standpunkt, dass die Simultanschule die allein richtige Form sei, weil die konfessionellen Gegensätze überbrückt würden. Sie also in konfessionell gemischten Gegenden die allein erstrebenswerte Schulform. Wir erkennen sie an, wenn sie auf der gemeinsamen Forderung der katholischen und der evangelischen Eltern beruht, wenn die praktischen Verhältnisse in kleinen Gemeinden diese Schulform empfehlen—aber wir wenden uns in aller Schärfe gegen sie, wenn sie als die alleinige Schule von Staatswegen eingeführt werden soll. Einem solchen Gewissenszwang können wir niemals beistimmen.

Darum nochmals: Es giebt nur *einen* Weg, den *Familien* die Freiheit der Bestimmung zuzuschieben—und damit selbst eine heilsame Erziehung des Volkes zu grösserer Selbständigkeit und Charakter herbeizuführen.

Unsere Schulen sind mit Recht die geistigen Ernährungszentren genannt worden. Unter ihnen nimmt die *Volksschule* die wichtigste Stellung ein, da der grösste Teil unserer Kinder in den Volksschulen ihre geistige Nahrung erhalten. (90 per cent.)

II. *Allgemeine Volksschule.*

Deshalb müssen wir zunächst auf eine zeitgemäss gestaltete, wohl ausgestattete, allen zugängliche Volksschule dringen. Sie muss zu einem kräftig wirkenden Institut sozialpsychologischer Hygiene ausgebaut werden. Das ist eine der dringendsten Forderungen unserer Zeit, vor allem vom Standpunkt der christlichen Ethik aus. Heute aber wird vielfach noch die Volksschule nur als eine Art Armenschule betrachtet, gerade gut genug, um den Kindern der breiteren Massen die nötigsten Kenntnisse und Fertigkeiten beizubringen.

Mit dieser Auffassung muss gebrochen werden, da sie unchristlich und inhuman ist. Ihr stellen wir die Forderung entgegen, dass eine allgemeine Volksschule e gerichtet werden muss für alle Kinder aller Stände. Sie bilde die gemeinsame Grundlage, den breiten Unterbau unseres gesamten Schul- und Bildungswesens. In ihr komme der Gedanke der Zusammengehörigkeit aller Glieder unseres Volkes zu lebendigem Ausdruck und des organischen Aufbaues unseres gesamten Schulwesens. Eine solche Einrichtung ist geeignet sozial versöhnend zu wirken. Darum fordern wirsie in erster Linie.

1. *Einwand.*—Sie nützt nichts: das Leben ist stärker, als die Schule. Gewiss! Man erwarte nicht zu viel von ihr. Die Vereinigten Staaten von Nord-Amerika besitzen diesen allgemeinen Unterbau, und zwar in sehr ausgedehnter Weise. Trotsden tritt bekanntlich dort der Gegensatz zwischen Arm und Reich, Zwischen Vornehm und Gering in sehr scharfer Weise hervor.

Aber es ist doch keine Frage, dass wenn auch das *Leben* die sozialen Unterschiede immer in einer gewissen Schärfe hervortreten lässt, in keinem Fall die *Schule* berufen ist, diese Unterschiede ihrerseits noch zu verschärfen.

Ähnlich wie die Kirche hat die Schule in erster Linie die Aufgabe, das rein Menschliche zu betonen, versöhnend zu wirken, das Trennende möglichst zurückzudrängen und den Gedanken

der Zusammengehörigkeit aller Volksgenossen recht stark zu betonen. Deshalb verlangen wir die allgemeine Volksschule und wünchen, dass die Spaltung, die durch die Teilung der Kulturarbeit gefordert wird, erst eintrete, wenn man übersehen kann, in welche Arbeitssphäre das Kind später seiner Beanlagung nach einzuführen ist. Die Vorschulen bei den höheren Schulen müssen beseitigt werden. Ich kann mich kurz fassen, da diese Frage bei uns auf allgemeine Zustimmung rechnen kann. Hinweisen will ich nur, dass Kulturminister Bosse ein warmer Freund der allgemeinen Volksschule ist, dass die ganze deutsche Lehrerschaft seit Jahrzehnten diese Forderung auf ihre Fahnen geschrieben hat und dass die allgemeine Volksschule in Bayern bereits verwirklicht ist.

2. *Einwand.*—Vom Standpunkt der Psychologie sagt man, Kinder verschiedenster Begabung können nicht zusammen unterichtet werden. Das ist richtig. Es herrscht bei den neuaufgenommenen Schülern der verschiedenen Stände anfangs ein grosser Unterschied in intellektueller Beziehung. Man hat auch Befürchtungen in moralischer Hinsicht ausgesprochen. Das ist ein Vorurteil, denn reich sein heisst nicht gut sein und arm sein nicht schlecht. Wie aber sind solche geistigen Unterschiede, die in der Erziehung vor der Schulzeit begründet liegen, zu besiegen? Ganz sicher können sie gemildert werden durch die Einrichtung von Volkskindergärten für die Sprösslinge der geringeren Leute. Dagegen hebt sich ein anderer, gewichtigerer Widerspruch. Wir vertreten auf dem Gebiet der Schule das Selbstbestimmungsrecht der Familien. Wie nun wenn reiche, vornehme Familien die allgemeine Volksschule ablehnen? Wir können nichts anderes thun, als sie gewähren lassen; wir können sie direkt nicht zwingen. Vielleicht halten gegenwärtige Volksschulzustände diese Familien ab, ihre Kinder der Volksschule zu übergeben. Dieser ablehnenden Stimmung kann am wirksamsten begegnet werden durch gründliche Verbesserung der Schuleinrichtungen. Es sind grosse Fortschritte nötig' sonderlich auf dem Gebiete der Schulhygiene, um billigen Forderungen völlig gerecht zu werden. Um nur eines anzuführen: Die überfüllten Klassen müssen endlich aufhören. Das Maximum der Schülerzahl einer Klasse sei 40, während es gegenwärtig oft 80 beträgt. Gerade die kleinere Schülerzahl in den Privatschulen wirkt anziehend auf den Entschluss vornehmer Eltern. Um die Segnungen der allgemeinen Volksschule aber möglichst wirksam zu gestalten ist dieser Unterbau nicht zu kurz zu bemessen, drei Jahre sind ungenügend; es empfiehlt sich vielmehr ein fünfjähriger gemeinsamer Unterricht.

Die damit verbundene Forderung der Schulgeldfreiheit und der Unentgeltlichkeit der Lehr-und Lernmittel in der Volksschule geht von dem Gedanken aus, den *ärmeren Volksklassen* eine Erleichterung zu schaffen, die gewiss nicht gering anzuschlagen sein dürfte und damit einen Beitrag zum sozialen Ausgleich zu liefern. Andrerseits wird dadurch dem Unterrichtsbetrieb insofern eine grosse Unterstützung zuteil als dadurch die Unregelmässigkeit und Ungleichmässigkeit in den Lehr-und Lern-Mitteln beseitigt würde, die häufig durch den Mangel bei den

ärmeren Schülern hervorgerufen wird und viel unnötige Mühe und Ärger dem Erzieher verursacht.

So hat die Forderung eine theoretische und eine praktische Seite, die beide zu ihren Gunsten sprechen.

Man kann zwar den Einwand erheben, dass die *Elternrechte* gestärkt würden, wenn man die *Elternpflichten* kräftige; dass es also im Interesse der Erziehung liege, die *Elternpflichten* nicht zu sehr abzuschwächen. Es mag dies durchaus richtig sein; aber wir meinen, auch nach Aufhebung der Schulgeld- und Lernmittel-Pflicht bliebe den Eltern noch genug zu thun übrig. Ferner hat man eingewendet, dass die Kinder mit den gelieferten Büchern u.s.w. zu leichtsinnig umgehen würden, da auch die Kontrolle der Eltern fehlen würde. Diese Gefahr ist gewiss vorhanden, muss aber durch den Einfluss des Lehrers im Bund mit den Eltern möglichst beseitigt werden.

Der *soziale Gesichtspunkt* erscheint mir auch hier ausschlaggebend. Er aber weist auch darauf hin, dass wir hier nicht generalisieren dürfen. Denn setzen wir die Einführung der allgemeinen Volksschule voraus, so würden dann auch die Kinder der reichsten Eltern an der Befreiung teilnehmen, und das erscheint mir ein Unding. Ich kann daher die Forderung nur gelten lassen für alle die Schichten, für die die angegebene Befreiung zur Notwendigkeit würde. Dazu dürften zunächst alle die gehören, die von der direkten Einkommen-Steuer befreit sind. Weiter kann man ja auch die unteren Steuerstufen noch dieses Rechtes teilhaftig machen; ich wende mich *nur dagegen*, aus öffentlichen Mitteln auch die zu unterstützen, die einer solchen Hilfe absolut nicht bedürfen.

Im Anschluss hieran vertreten wir die weitere Forderung, dass begabten Kindern unbemittelter Eltern eine ausreichende Unterstützung aus öffentlichen Mitteln zu teil werde, damit sie eine höhere, ihrer Begabung entsprechende, Ausbildung erlangen können.

Es mag dies jetzt schon hie und da geschehen; der Wohlthätigkeitssinn hat sich ja auch hierin bethätigt; aber hier, wie überall, doch nicht in ausreichendem Masse. Aber es muss mehr geschehen, denn aus den breiten Volksschichten müssen immer neue Kräfte in die führenden Kreise hineinwachsen um die abgenutzten und degenerierten zu ersetzen. Andre freilich meinen, man solle das Gelehrten—und Gebildeten-Proletariat nicht noch vergrössern helfen. Der Thatsache aber gegenüber, dass nicht selten unbegabte Kinder doch durch die höheren Bildungsstufen hindurchgeschoben werden kraft der Stellung und der bevorzugten finanziellen Lage der Eltern, sei darauf hingewiesen, dass ein Ausgleich darin gesehen werden muss, wenn den begabten Kindern der unbemitttelten Klassen ihr Vorwärtsstreben nicht abgeschnitten werde nur wegen ihrer minder günstigen finanziellen Lage. Wenn man bedenkt, wie viele geistig tüchtig Beanlagte doch verkümmern in der Not der Verhältnisse, und wie viel Kräfte dadurch unserem Volk verloren gehen, so erscheint es auch im Interesse des Ganzen durchaus geboten, den Begabten aber minder Bemittelten das Emporsteigen in höhere *Berufe* und Thätigkeiten zu ermöglichen.

III. *Fortbildungsschulen und Fachschulen.*

Die *vierte* Forderung bezieht sich auf die *allgemeine, obligatorische* Fortbildungsschule. Mit vollem Recht wird die Frage aufgeworfen, ob für die, welche mit dem 14. Lebensjahr die Schule verlassen müssen, um dem Erwerb nachzugehen, nun ihre Bildungszeit abgeschlossen sei, ob das ihr Anteil bleiben soll, was die Volksschule ihnen für das Leben mitgiebt.

Wir müssen die Frage verneinen. So tüchtig die Volksschule erzieherisch und intellektuell gearbeitet haben mag, es ist doch nicht ausreichend und kann nicht ausreichend sein. Denn die Zeit vom 6–14. Lebensjahr ist zu kurz und die Periode vom 14. Lebensjahr an bis zum Eintritt ins Militär ist gerade für die jugendliche Entwickelung höchst bedeutungsvoll. Die jungen Leute beginnen nach dem Austritt aus der Schule, nach der Konfirmation sich freier zu regen und zu bewegen. Damit nehmen sie eine Menge von Eindrücken auf, denen nur zu viele kritiklos erliegen. Das ist eine Thatsache. Und die bürgerliche Gesellschaft kennt sie auch, ergeht sich in vielerlei Klagen über die heranwachsende Jugend, ihre Genussucht, ihre Begehrlichkeit, ihre Zügellosigkeit, schreibt in bequemer Selbstüberhebung alles auf das Konto der gottlosen, verführerischen Sozialdemokratie— aber thut selbst so gut wie nichts dazu, um die Lücke auszufüllen und der Verführung wirksam entgegen zu treten.

Wie viel besser haben es auch hierin die *Kinder* der *höheren Stände*. Ihr Bildungsgang ist genau geregelt und geht in gerader Linie unter steter Führung und Obhut auf das Ziel hin. Schritt reiht sich an Schritt, für alles ist vortrefflich gesorgt. Aber bei der grossen Masse des Volkes klafft eine Lücke. Zwischen Volksschule und Militär ist die Jugend sich selbst überlassen in der gefährlichsten Zeit der Entwickelung. Einige Ansätze zur Fürsorge sind ja vorhanden von Kirchlichen, von Privat-Vereinen und in einigen kleineren Staaten von Staats wegen. Aber wie unvollkommen sind alle diese Einrichtungen und wie wenige treffen sie unter der Masse der Jugend. Wo aber gegenwärtig Fortbildungsschulen eingerichtet sind, da ist die Kursusdauer zu kurz, sie dauert vom 14–16. Jahr, und die Unterrichtszeit ist zu kurz (4 St.), noch dazu Abends. Der erzieherische Einfluss ist gleich null.

Zusammenfassend erheben wir fol gende Forderungen:—

1. Die *Organisation* des öffentlichen Erziehungswesens ist insofern Sache des Staates, als er das gesamte Schul- und Bildungswesen überwacht und gesetzgeberisch regelt. Dieses ist auf den Prinzipien der Gewissensfreiheit und der Selbstverwaltung in konstitutioneller Weise, aufzubauen, um den beteiligten Interessenten, den Familien, Gemeinden und religiösen Gemeinschaften genügenden Platz für wirksame Mitarbeit zu schaffen, wie die Gefahren einer einseitigen Schul-Bureaukratie zu vermeiden. Privatschulen unter staatlicher Aufsicht sind zuzulassen.
2. Wir verlangen einen *gemeinsamen Unterbau* für alle Schulanstalten die "Allgemeine Volksschule." (Besei-

tigung der Vorschulen an staatlichen und kommunalen Schulanstalten.) Um die allgemeinen Volksschulen lebensfähig zu gestalten, muss vor allem die Überfüllung der Schulklassen vermieden werden. Die Zahl der Kinder darf in einer Klasse nicht über 40 betragen.

3. Wir fordern *Unentgeltlichkeit* des Unterrichts und der Lehrmittel, ferner ausreichende finanzielle Ausrüstung aus öffentlichen Mitteln zum Besuch höherer Schulen für begabte Kinder unbemittelter Eltern.
4. Wir erstreben für die männliche und weibliche Jugend eine *öffentliche erzieherische Fürsorge* und eine gut eingerichtete *allgemeine obligatorische Fortbildungsschule* vom 14. bis 18. Lebensjahre, die nicht nur intellektuell fördern, sondern auch erzieherisch wirken soll. Ein weitergehendes Bildungsbedürfnis kann durch die Volkshochschulen, Volkslesehallen, Volksbüchereien und gemeinnützigen Vereine befriedigt werden.

IV. *Die höheren Schulen: Gymnasien, Realschulen*

Die letzte Ordnung dieser Schulen wurde in Preussen durch die Ministerial-Verfügungen aus dem Jahre 1892 herbeigeführt. Sie waren der Ausfluss der Beratungen, die im Dezember 1890 im Kultus-Ministerium in Berlin unter der Teilnahme des deutschen Kaisers stattgefunden hatten. Damit ist zwar eine Neuordnung eingeführt, aber keine abschliessende Entscheidung. Denn niemand ist mit ihr zufrieden. Die klassischen Philologen, die konservativen Gymnasialpädagogen jammern vor allem über die Verkürzung der Lateinstunden im Gymnasium und behaupten, das Ziel nicht mehr erreichen zu können. Die Anhänger der Realschulen sind unzufrieden, dass die Bildung ihrer Anstalten vom Staate noch immer so gering geschätzt werde, dass ihnen Berechtigungen versagt bleiben, die nur die Lateinschule besitzt. Alte klassische und moderne Bildung stehen einander gegenüber; die erstere behauptet noch das Feld. Aber es ist heiss umstritten. Schrittweise verliert die altklassische Bildung an Boden. Der Entlatinisierungsprozess macht täglich Fortschritte. Dies zeigt sich auf allen Gebieten, auch auf dem der Schule. Beweis dafür ist, dass die so genannt. Reform-Gymnasien (Frankfurt a/M. u. a.) immer mehr Freunde gewinnen und anscheinend die Schulen der Zukunft sein werden. Die Hauptänderung besteht darin, dass mit dem Französischen der fremdsprachliche Unterricht begonnen wird, statt—wie bisher—mit dem Lateinischen. Schulreform-Vereine vertreten diese Anordnung, die einen gleichen Unterbau für Gymnasien und Realschulen einführt, mit grosser Wärme und wachsendem Erfolg.

Es kommt hinzu, dass immer kräftiger gefordert wird, dass beide höhere Arten von Schulen, Gymnasien und Ober-Realschulen, vollkommen gleiche Berechtigungen erhalten sollen, dass damit die Gleichwertung der antiken und modernen Bildung ausgesprochen wird. Erst dadurch werde offenbar, welche Bedeutung die altklassische Richtung noch in unserem Volk besitze,

wenn sie nicht mehr durch Privilegien gestützt, sondern in freie Konkurrenz mit der modernen Realschulbildung hineingestellt werde. Und dies ist entschieden das Richtige. Was Kraft und Leben im Volk besitzt, soll sich bethätigen können. Das braucht auch keine künstlichen Stützen von Staats wegen. Braucht es sie aber doch, so wird dem Leben des Volkes in Wahrheit nicht damit gedient. Das Alte erscheint dann mehr wie eine Rarität, die nur durch die Macht der Tradition vererbt, aber nicht täglich neu erobert wird.

Wohin wir blicken in Deutschland, überall ein rühriges Leben, ein Ringen und Streben nach vorwärts, ohne die altbewährten Grundlagen aufzugeben. Fassen wir die Stellung des Schulwesens im Ganzen ins Auge, so ist offenbar das Bestreben vorhanden einer zu straffen staatlichen Zentralisation, wie sie die geschichtliche Entwickelung gezeitigt hat, durch eine vernünftige Dezentralisation vorzubeugen, um alle Erziehungsinteressenten an dem gewaltigen Werke der Volksbildung zu beteiligen. Hinsichtlich der Lehrerbildung ist man bemüht Männer und Frauen zu dem schweren Beruf, den die Volkserziehung auferlegt, tüchtig zu machen, sie mit Kenntnissen auszurüsten und mit Begeisterung zu erfüllen, damit die künftigen Generationen des deutschen Volkes mit wachsender Kraft und Einsicht die Kulturaufgaben erfüllen können, die Gott dem deutschen Volk gestellt hat. Sie liegen nach der Ansicht der Führer des Volkes nicht sowohl auf dem sichtbaren wie viel mehr auf dem unsichtbaren Gebiet. Zeitweilig mögen sie verdeckt sein durch den Kampf ums Dasein inmitten der Völkerfamilien; aber dass sie immer wieder durchleuchten durch das Gewölk der materiellen Sorgen, dafür sollen die Erzieher eintreten, die Avantgarde der idealen Mächte.

Und in diese schöne Aufgabe müssen immer mehr die Universitäten hineingezogen werden, die Hochburgen der Wissenschaft, auch der Wissenschaft von der Organisation des Volksbildungswesens, der Pädagogik. Der Geist der von hier ausgeht, soll hineindringen in das gesamte Schulwesen, das in klarer Abstufung, in gesunder Arbeitsteilung, gut organisiert, die künftigen Arbeiter des deutschen Volks für Hütte und Palast heranzieht.

Wir sind ein politisch ganz junges Volk. Erst seit 1871 sind wir geeint. Was uns etwa an Genialität, Intelligenz und Thatkraft noch abgeht, soll durch harte, stetige Arbeit an den kommenden Generationen ergänzt werden. So gewinnt die Erziehungsarbeit im Volk, wo sie auch stattfinde, oben oder unten, erhöhte Bedeutung. Jeder einzelne soll eine Ausbildung erfahren, seiner Eigenart gemäss, aber alle sollen zusammengestimmt werden auf einen Ton: charaktervolle, edelgesinnte und thatkräftige Bürger und Bürgerinnen eines irdischen Reiches zu sein, das immer mehr zu einem Abbild des Himmelreiches mit Hilfe der Erziehung gestaltet werden soll.

TENDENCIES IN THE EDUCATIONAL SYSTEMS OF GERMANY.

(Translation of Professor Rein's article on "Strömungen auf dem Gebiet des Schul-und Bildungswesens in Deutschsland.")

The future of a people depends upon the proper development and strengthening of its productive power—the capital, on the possession of which its economic and political independence rests. The aim, therefore, of all, who have the well-being and progress of their nation at heart, must be directed towards the improvement and increase of this "national capital." In it two elements are comprised—ideal and material; for the productive capacity of a nation is concerned, on the one hand, with the elevation and intensity of its spiritual life, as realised in art and science, morality and religion; on the other hand, with the increase and extension of its material wealth—whether in the sphere of agriculture, manufacture, or commerce. The latter purpose the State promotes by its economic policy; the former by its attention to the whole of its educational system.

Though externally a separation exists between these two sides of life, there is yet a necessary internal connection between them. But the relation is not to be conceived as one in which the economic conditions form the essential foundation for a complete development of man; and we may not justly conclude that attention to the economic prosperity of a people necessarily includes the promotion of all its other interests. Such a point of view is found in the materialistic interpretation of history derived from Marx, which maintains that all spiritual development—moral and intellectual alike—is the outcome of the economic position of the time, and, consequently, that an elevation of the whole community must follow spontaneously upon an improvement in its economic conditions.

The truth in this view is clear. There *does* exist a deep internal connection between economic conditions and moral and spiritual environment, but this connection does not mean merely a derivation of the one from the other. History and experience flatly contradict such an opinion. Economic oppression does not necessarily involve mental captivity. The human will can rise above all external hindrances and obstacles. Economic conditions, when unfavourable, may, and very often do, check mental and spiritual progress; but, from the other side, it may be asked—Have they not, when most favourable, often produced precisely the same result? The power of ancient Rome was shattered because its religious and moral energies declined, while its riches maintained a steady increase. And a similar

experience constantly meets us in the life of the individual. Spiritual, not economic, forces should play the leading part in life. Where they abnegate their supremacy, the worth of the individual sinks, and the community is fated to destruction.

The promotion of material prosperity should therefore be properly balanced by an unremitting attention to higher interests. Above all, we should guard against the danger of a nation losing itself in the hunt for wealth. In its wish for the increase of external goods it should not forget that such increase must go hand and hand with the improvement of inward culture, if it is not to produce a canker of the social organism—a canker which sooner or later brings ruin in its train. Here lies the significance of the spiritual forces at work in the economy of a people; and here is indicated the importance of those two institutions, to which the care of this side of the national life is committed—the Church and the School.

Viewed from this standpoint, the work of the educational system of a country is seen in clear relief. The handling of that system in the proper method and its organisation are matters of no mean importance to the statesman who desires to influence the growth of a nation and to put its future upon the right lines of development. Side by side stands the science of education, pædagogy, ready to point the statesman to the sure ways, by which the health, power, and energy of the rising generation may be developed and strengthened: and, further, it should reveal to the educator both the end and means requisite for bringing each individual to his due place within the nation.

If, therefore, on the one side, the science of social economy seeks to discover and regulate ends and means for the industrial life of the citizens; the science of education, on the other side, seeks to show how the rational promotion of spiritual life should find its goal in the exertion of a proper influence upon the rising generation.

I. The Part of the Universities in the Work of Education.

That the formation of these two sciences should proceed in a sound and equable course of development, that the union, the action, and reaction between them and the national life should be close and constant—this clearly constitutes the work of our institutions of academic rank and, above all, of the universities. Our glance therefore is naturally first directed upon our universities as the chief centres of all mental cultivation and labour. The question is forced upon us—"What have they done towards the formation of a science of education, and what have they still to do?" In the answer to this question a characteristic imperfection becomes at once visible—the disproportion which appears between the development of the science of political economy and that of education. While the former has received an exceedingly careful and thorough attention through the efforts of a series of the most prominent men, such as Roscher, Schmoller, Wagner, Brentano, Weber, and others, the science of education has lagged far in the rear. This state of things

is primarily due to the fact that the vast majority of the German Universities even now possess no independent Professional Chair of "Education"; while Political Economy has for some time enjoyed a place of its own in every high school.

An enquiry into the grounds for the position of affairs thus disclosed cannot be pursued here. The neglect of the Science of Education in most of the German Universities is established beyond doubt. This estimate is not to be altered by the consideration that men like Eucken (Jena), Baumann (Göttingen), Jürgen Bona Meyer (Bonn), L. Meyer (Tübingen), Paulsen (Berlin), Schiller (Giessen), Uhlig (Heidelberg), Vogt (Wien), Willmann (Prag), Ziegler (Strassburg), and others have worked, and still work, zealously and with good results in this field. The following summary (which has been compiled as the result of an inspection of the study of pædagogics as it exists in the Prussian Universities and in the Thuringian University of Jena) speaks clearly enough for itself.

In the whole of the Prussian Universities together 435 lectures and classes on education, occupying 1217.5 hours, were delivered in the last nine semesters; in Jena sixty-eight lectures and classes, occupying 158 hours. These figures yield—for Jena an average of 7.6 lectures, occupying 17.6 hours per week in the semester, an average which is to be compared with the 4.4 lectures, occupying 12.3 hours per week in the Prussian Universities. Among the latter Berlin leads the way with an average of 10.4 lectures in twenty-seven hours per week; Königsberg comes last with 1.5 lectures in 5.3 hours per week.

The neglect of the science of education in the German Universities is a matter for great regret in the interests of science and of the education of the teacher and the nation. Let us concentrate our gaze upon the last of these points. When once it is admitted to be a matter of importance that the chief homes of scientific enquiry should maintain a close sympathy with the dominant tendencies of the people at large, there can be no doubt that interest in the education and culture of the nation in all its various classes ought not to be foreign to the centres of its intellectual life. Where this happens, these centres lose a part of their influence; they stand outside the motive forces at work in society, and remain unnoticed by them. It is no uncommon occurrence in Germany to hear the reproach expressed against our Universities that they have alienated themselves too much from the spiritual life of the nations. In consequence —so it is urged—they have exercised too slight an influence on the development of events, since it ought to be their privilege to take a determinative part in the development of the nation.

We cannot here enquire how far this reproach is justified. We can only say that in regard to the system of education it appears to be correct, and this view is in accordance with the fact that the science, whose enquiries are concerned with the proper form and principles to be observed in the work of educating a nation, is, with few exceptions, without any independent representation at our Universities.

We cannot, therefore, wonder that educational affairs are abandoned to other agencies, possessing, as a rule, neither the capacity nor the desire to bring about a settlement of these problems on a basis of principle, but compelled to compromise between the pressure of public opinion and tradition, to decide each case as it occurs, without enjoying the benefit of being directed by a determinate system of principles. Small wonder that our educational affairs have fallen into a confusion which has been increased rather than lessened by the Conference at Berlin in December, 1890. This could not have happened had the science of education been able to speak with decisive voice from within our Universities. But in many cases our Universities could not bring themselves to a proper appreciation of these educational problems; and this failure is now taking a bitter revenge on our whole national life, on whose character the methods and organisation of the national system of education unquestionably exert a decisive influence. If the Universities, through being absorbed in an excessive devotion to scientific specialisation, renounce their share in this influence, by so doing they deprive themselves of a potent means of influencing the intellectual development of the nation.

Recently matters do, indeed, appear in the Prussian Universities to have taken a step for the better. The Education Department in Berlin has established two independent Professorial Chairs of Education in the Universities of Halle and Berlin. Dr. Fries, the Director of the Francke'sche Stiftung, has been appointed to the former: Dr. Münch, of Coblentz, to the latter. A memorandum, drawn up by Geh. Rat. Dr. Schrader, Curator of the University of Halle, may be taken as prescribing the duties of these professors. The memorandum is reprinted in No. 53 of the magazine "Lehrproben und Lehrgänge," Halle, 1897. According to this memorandum the undermentioned course is to be followed in the study of education at the Universities of Halle and Berlin: —

(1.) The History of Education and of our schools since the 15th century—2 to 3 hours weekly for one term.

(2.) A connected exposition of the Theory of Education and Instruction—3 to 4 hours weekly.

Moreover the Professor is to bring before his class, in weekly classes of an hour each, models for the treatment both of individual authors and of suitable selections from such subjects as Religion, History, and Mathematics. In connection with these classes it may be arranged for the students to be present at lessons given in a secondary school in the neighbourhood.

II. The Training of Teachers for Secondary Schools.

It may be easily seen that the aim of these regulations is limited to the education of the candidates for posts in our higher schools, and especially for the Classical Schools (Gymnasien). This is certainly a step in advance when we contrast it with the

entire absence of such training which has hitherto prevailed. But it is only a step on the way which must be trodden. For it is not the business of our Universities to devote themselves to a one-sided formation of a "Science of Education for Secondary Schools," or a one-sided preparation of those intending to teach in secondary schools. More important matters claim their attention; viz.—a many-sided interpretation, based on ethical and psychological principles, of all the problems in education which in so many forms fall to-day within the province of our national life. The regulation of the Curator of Halle is, as it were, the word of a prophet who looks to the past, and with that the Universities cannot be content. The science of education taken as a whole will win but little advance through this means. The advance, such as it is, is limited to the sphere of the training of teachers.

Since 1892 the teachers of Secondary Schools in Prussia and some other German States have been trained in so-called "Gymnasial-Seminare," * which are connected with Secondary Schools. In that step attention was fixed chiefly upon the practical equipment of teachers. The theoretical training was to have been previously given by the University. But so far little opportunity has been afforded by the Universities for the purpose. Now, through the foundation of the Professorships of "Secondary Education" as we may rightly call them, the gaps are to be somewhat repaired. But the whole plan of this training for teachers remains perpetually hampered by the great disadvantage that Theory and Practice are severed from one another. In the view of a more profound criticism, such a mechanical division of the work appears so replete with contradictions that it can only be looked upon as a makeshift.

A glance at the Training Colleges for Primary and Higher Primary Schools can point us to the right direction, the union of Theory and Practice, their interpenetration, and the preservation of this union during the whole period of the young teacher's training. The Seminar at the University of Jena, also, which has now been at work for more than fifty years, has held fast to this conviction, because it alone is founded on a true basis. (See the volumes entitled "Aus dem Päd. Universität-Seminar zu Jena," published at Langensalza. Beyer and Son.)

The aim of the present movement in the training of teachers for Secondary Schools is to put the power of the Universities into action. There is also a desire to make a similar attempt in the interests of the Primary Teacher, but in a different manner. This leads us to consider

III. The Training of Primary Teachers.

(i.) The institutions for the scientific training of teachers in Secondary Schools are of recent date, except the year of pro-

* These are not independent institutions, but a certain number of students are attached to an ordinary secondary school. The headmaster, assisted by other members of his staff, is responsible for their training in the practical duties of teaching.

bation, which is already of a very venerable antiquity, but in spite of this is not highly valued. But many Training Colleges for Primary Teachers can trace their foundation far back in the last century. The fact, therefore, that substantial progress both in organisation and education has been made in the course of the present century, is easily intelligible. The improvement can be recognised even in externals, in the provision of admirable buildings. The last step of importance in Prussia was made by the "Regulations of Dr. Falk" in 1872. Since then there has been a cessation of progress, which has aroused an ever-increasing mass of criticism, and attracted the efforts of reformers.

In this point the whole body of elementary school teachers in Germany, numbering over 100,000 persons, was at one. "The education given in the Training Colleges is no longer sufficient"—this is the unanimous cry which can be heard throughout the Empire. The chief subject of debate to be brought before the Teachers' Conference in Breslau next year* runs:—"What demands does the present time make upon the education of the teachers?" Even now this question is much discussed in smaller gatherings and in essays, among which those of Dr. Andreä, Principal of the Training College in Kaiserslautern, take the chief place. Here, however, appears a sharp opposition in the view taken of this subject; an opposition which proceeds from the varying interpretation to be put upon the words "the present." The question may justly be put, "What is the present?" The present bears no such simple stamp upon it, that its demands can be recognised and understood without further thought. Who is to say which of the various tendencies, all seeking to claim the prior place in the race to influence our contemporaries, will finally emerge as the victor? So far, at any rate as the education of teachers is concerned, the present speaks with no single voice; here, too, its words are in very different tongues. To which are we to listen as the true one? We have to choose between two points of view which have long stood in sharp antithesis; but to-day the keenness of the opposition between them makes itself felt more than ever before.

One tendency is directed towards the maintenance or recall of a patriarchal and despotic relation between rich and poor, educated and uneducated. The community, it is said, feels itself happy in such an order of things, an order which in course of time comes to be looked upon as expressly sanctioned by the will of heaven. To the adherents of this view, it appears most suitable to equip the children of the people at large only with the tools necessary to make the worker a useful instrument for all mechanical service, and skilful in the production of wealth. To this equipment belong Reading, Writing, Arithmetic, and Religion, the inculcation, that is to say, of resignation to the fate which is the portion of the poor and lowly upon earth, in the hope of a compensation in the future life.

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* The above passage was written in November, 1897, and refers to the Conference held at Breslau, from May 30th to June 3rd this year.

From this point of view far too much has been already done for the education of teachers. For anyone who desires to check popular education will naturally first wish to put a stop to the education of the Primary Teacher, and thus prevent the existence of any danger that the national education may exceed the desired modicum. From this ground has sprung the proposal to appoint as Primary Teachers non-commissioned officers who have completed their service. Under Frederick the Great this might have appeared as a step in advance when contrasted with the position of affairs at that time. But that even in our own day a man like Treitschke could recommend the system only proves a gross ignorance of the educational needs of the masses, and a gross ignorance of our Training Colleges. More recently the idea has been revived by a lecturer in the Faculty of Law in Berlin, but it was unanimously rejected as not admitting of serious discussion.

A second tendency takes its rise from the experience that to administer an artificial check to popular education is an impossibility. Since the introduction of compulsory school attendance, of universal service in the army, and of universal suffrage, the wish to call a halt to the steady progress of education borders on foolhardiness. The wish would also be thoroughly unchristian. Christianity has raised the value set upon the individual human soul—an immense step forwards. In earlier times a man was a chattel like any other piece of goods, to-day he is a free personality, whose independent education within the community is assured. No despot's command, however powerful, can annul the idea of the freedom of the Christian man. Human law is shattered against this rock. But freedom involves, above all, the inward culture of the personality. A wise statesmanship in dealing with the deep-seated popular craving for education, which claims its satisfaction with exactly the same force as the craving for food, will try to put it on the right path, and to keep the advance within the bounds of moderation.

The education of teachers has now to keep pace with this progress in the education of the people at large, not hanging as a drag behind it, but rather preceding it. Only it should not be so far in advance that it loses sympathy with the people; for then its guidance fails. This, however, is the case if the ideal of the elementary teacher's training is so far overstrained as to involve the demand for the completion of every primary teacher's education at the University. Here we have the second extreme embraced at the present day. The two views stand in sharp contrast, the equipment of the non-commissioned officer and the culture of the University. The one looks backwards to a past which is far removed from the present; the other forwards, to a future which hovers before us in the mist of the distance.

It is possible that the development of events may some day bring it about that all teachers of the young derive their education from the same source—viz., the University; but, in order to work now, we must take our stand on the firm ground of the present. Our own view is clearly indicated in

these considerations; it rests on the present, it links itself to the demands made upon us by our own day, and strives carefully to spin further the threads which woven in the past extend into the present, and are now to be carried further onwards and forwards. Sound progress is never made by leaps, but by steps.

The present day shows us distinctly a great advance in the conduct of life among the lower and middle classes of society, and connected with it an increased desire for education, a desire also obvious and apparent in the abundant use made of public libraries and the lectures of the University Extension Courses* which have been called into life in Vienna, Jena, Leipzig, Munich, and elsewhere.

In order that this longing may be rightly directed, may be guided into proper channels, and, above all, avoid superficiality in its extension, we need a sound education for the guides and educators of the people—a class to which belongs the Primary Teacher. The question is raised, Are they so thoroughly equipped for their office as to satisfy the demands, undoubtedly heightened, of the present day? This question must be answered in the negative.

(ii.) In our answer we are guided by the consideration that advance to a higher and broader education of teachers must be demanded in the interests not of the teacher, but of our nation. Anyone who only has in view the position of the teacher will scarcely keep himself free from exaggerated desires. In the effort to raise the teacher to the highest watch-tower attainable by man we cut the ground from under our feet. We ask them, What demands upon the teacher are made by the *present?* And by "the present" we understand our present society, our present elementary and continuation schools. How is the education of the teacher to be directed in order that the education of the people at large may make proper progress?

The goal of our aims here must not be merely an equipment sufficient for the Elementary School, whether staffed by one teacher or more; we must pitch our aims higher. The teacher should be enabled to get an unimpeded view of the whole province of education and training in order to attain the proper appreciation of his work; he should remain free from self-conceit as well as from narrowness of spirit. The Training College should, therefore, above all awaken in him a deep and abiding interest in the work of national education. Such an interest is worth more than a cramming with information, and a one-sided dexterity in the details of his work. The latter power should in no case be wanting, but it should be sustained by a quiet, deep enthusiasm for the problems of education, which remain to be solved among the mass of our nation. Something more is needed for this purpose than knowledge of methods of teaching this or that subject. To make the mind fresh and clear, to stimulate it, a thorough acquaintance with the foundations and basis of the Science of Education, with Psychology and Ethics, should

* *Volkshochschulen.* These are the German equivalent of our University Extension courses, but have less organic connection with the University administration than is the case in England.

be demanded. Under the head of Psychology we must avail ourselves of the conclusions of recent psychology and of child study, embodying them, I need not say, in a course of instruction based throughout on inductive principles. Further, the Science of Education, including both General and Special Method, should have special attention; while the History of Education, *i.e.*, the reading of the classics of pedagogy, can be left to private study. To the foregoing we must add the arrangements which are requisite for training a student in the practical work of teaching: viz., work in the practising schools, criticism lessons, and discussions; and the full circle of the training, which must be regarded as the chief aim of the Training College, is then complete. As we have already remarked, a subordinate aim is to be found in the continuation of the student's education in the special subjects and sciences, which serve the purpose of general culture. Instruction in these subjects, however, should be imparted not in a rigidly didactic fashion, but with more opportunity for individual work, *i.e.*, by alternating the lectures given by the teachers with themes prepared by the students in succession and discussed by the class, and by giving opportunities for independent work and experimentation in the natural sciences, etc. In this point the Training College for primary teachers may well keep in mind the free activity which prevails at the Universities in the attendance at lectures and in the work of the Seminar.

(iii.) Such an organisation of the Training College as I have described, pre-supposes, I admit, a very different preparation for it from that which has been hitherto given. In order to raise the level of the work of the Training Colleges and to make it most intellectually thorough, the students, upon their entrance to them, must be far more thoroughly educated than has previously been the case. Our attention, therefore, must be chiefly directed to this previous education. The glance which we previously took at the training of teachers for secondary schools compels us also to turn to this subject.

In the one case we find an excellent general education, but an imperfect equipment in the science of teaching, at least as things were up to the year 1892; in the other case, a better system of training from the point of view of "technique," but a general culture by no means equal in merit to the technical; and for this reason, if for no other, that the knowledge of a foreign language frequently formed no part of the course.

While, then, in the case of the secondary teacher, weight must be laid on the necessity for technical equipment, in the case of the primary teacher the difficulty lies in the improvement of general culture. This improvement we must demand in the interest of the efficiency of every individual teacher, in the interest of his education. But we must also demand it in view of the social status of the profession of elementary school teachers. The social estimation in which any profession is held is generally determined by the range of general culture normally possessed by the individual members of that profession. Since, up to the present time, the general culture of the elementary

teachers has undoubtedly been defective, the general estimation in which their profession is held, has been consequently low, though such under-estimation is not perceptible or appreciably harassing in the case of the individual teacher, who rests secure within himself in the consciousness of the efficiency of his work and of his true and faithful service.

Nevertheless the under-estimation of the elementary school teacher goes, as a rule, much farther than is justified: it is part and parcel of the ignorance of the course of education pursued by an elementary teacher. However much improvement it may need, it is still far better than its reputation. For who among the public at large knows the industrious quiet work of the Primary Training Colleges? Who even among the teachers in secondary schools, troubles himself about them, or understands their value?

No one need wonder at this ignorance if we remember that the education of the primary teacher, from his fourteenth year, has been completely sundered from any of the widely-known educational institutions of the nation. Here we certainly touch a deep-seated fault in the course of training for primary teachers. It is, assuredly, impossible to see why this should deviate so widely from that of all other professions and in particular from that of the teachers for secondary schools. Such a state of things rests on no natural reason. Or are we to say that it is in some sense demanded by the regard paid to instruction in music? That would be to attach to such instruction an importance which it cannot really claim. Besides, the pianoforte, so far as is necessary for admission into the Training College, can very well be practised privately.

This isolation, then, of the course of education in the case of elementary school teachers rests on no sound principle. Its abnormality is only to be understood from a historical investigation, which shows that the beginning of their education was made by the foundation of Training Colleges—the organism, so to speak, started with its head.

It was not till the discovery was made that to a head should be joined the support of a body, that the special institutions to impart the necessary preparation were called into life. It is not remarkable that this work was often undertaken by the teachers in the Training Colleges. Their own difficulties brought home to them more than to others the trouble which arose from the bad state of preparation prevailing among the students desirous of entering Training Colleges. The attitude of the State—its aloofness, its readiness to allow others to grapple on its behalf with the faults in question—is easily explicable by the parsimonious disposition which predominates among us in regard to certain matters. Only the smaller States made any advance in this respect, as in others, by taking over the private preparatory schools and fusing them in isolated cases with the Training College. (The Saxon System.)

(iv.) This, it is true, must be called a step in advance, when contrasted with the earlier unorganised system, yet the develop-

ment brought with it the regrettable consequence that the education of teachers was thus severed from that of the general run of the professions. At the same time it induced a premature choice of a calling, and a corresponding narrowness of view from which one would have gladly seen the elementary teaching profession kept free. So far as my knowledge extends, we have only one other example of such exclusiveness—in our training of our future Army Officers, who pass through the Colleges for Cadets. Whether this is an advantage for a military training I do not venture to decide, but I am quite certain that any early isolation is a great disadvantage in the education of primary teachers. It entails a certain severance from the classes of the nation with which the teacher often mixed in later life, and the danger of a certain professional narrowness lies very near at hand. The natural arrangement, therefore, appears to me to be one which would allow the young man to grow up in the company of his equals, and to work and to compete with them, until the time has come for the choice of a profession, with its inevitable consequence—the division of the young students into the various technical or professional schools.

The next step, therefore, which I look for is the selection of one of the secondary schools as the place of preparation for the Training College, and the note of exclusiveness will be taken from the present course. But which type of secondary school should be chosen for the purpose? If we wish to build upon the foundation which we have, and not merely in the air, only the non-classical secondary school with a six-years' course (Real-Schule) can at present be taken into consideration. With a steady progress of the community, later times may choose the non-classical secondary school with a nine-years' course (Ober-Real-Schule). For the present, however, if we have regard to the present scale of salaries, which can only be improved, as a rule, little by little, this demand would be a gross exaggeration. But the demand for a course at a non-classical secondary school with a six-years' course is already quite attainable, and would clearly mean a great advance in the training of Primary Teachers. The non-classical secondary school with a six-years' course (Real-Schule), answers to every wish which we can at present form in respect of a sound basis of preparation for the Training College for primary teachers. While not claiming to give the highest type of education, it still provides an introduction to the culture of our times. Further, the Realschulen themselves, which in Prussia send out at present only some thousand scholars yearly, as contrasted with the 3,000 or more candidates needed by the Prussian Training Colleges, would gain an enormous addition to their strength. At present they are hampered in their work by the unfortunate arrangements connected with the various privileges attached to the different types of our secondary schools.

Our claims, too, are everywhere easy of attainment where the Prussian system is established. Here the training of teachers is still in a state of transition. The existing Realschulen can be

appointed as Preparatory Institutions for the Training College, and the existing preparatory schools can be converted into Realschulen, and, by that step, thrown open to all who desire to obtain a higher education than is afforded by the elementary school, though they may not desire to become teachers.

Greater difficulties present themselves in States where the Training College, with its six classes, has been organised on a firm basis as a great and self-contained institution. For myself, I can appreciate this organisation in the light of its history, but I cannot by any means regard it as an ideal. To my mind the necessity of the division of the general education from the technical (which should now be regarded as beyond question), demands as its correlative an external mark of the division in the form of two separate institutions. It is true that in a Training College of the kind of which we speak the higher and lower divisions can be easily cut off from each other; but the union of students of all ages in one institution still brings with it various discordant features, which can be better avoided by separation. I would, in particular, lay stress on the following points:—

(1.) Smaller organisations undoubtedly favour the growth of unity in the body of teachers, the mutual influence of the individual members and concentration of work. The influence of the educator is intensified in a smaller circle, because in such surroundings closer relations between teacher and scholar can be more easily promoted.

(2.) It will be, above all, in the interest of the Principal of the Training College that he should direct the technical education alone. His task lies in the pedagogical training, and the attainment of an influence upon the character of the coming teacher. He has quite sufficient to do in this sphere. If his supervision stretches further, his work is bound to lose in intensity what it gains in extension. The greater the organisation over which he presides, the more is his activity necessarily devoted to externals, the more abundant the clerical work imposed upon him—already the complaint of all Principals of educational institutions.

(3.) Emphasis should also be laid upon the fact that in the Training College with six classes, great elasticity in the discipline and education of the pupils is required. That such elasticity can be secured and steadily maintained, is indisputable. But under such circumstances it is, in any case, far harder to maintain with the necessary tact the proper limits between restraint and freedom in regard alike to the younger and older scholars, who all, in spite of the difference in their ages, form part of one community, and to secure for the student a satisfactory introduction into the actual practice of their profession.

(4.) Finally, I may be allowed to point out that an external break in the process of education is of undeniable advantage. The development of the course of training devised for our higher

professions is a further proof of this contention. There we see the following series of parallel institutions:—

Place of Education.	Professional Training.
The Gymnasium	The University.
The Ober-Real-Schule	The Technical College.

To these two parallels our theory would add a third—

The Real-Schule	The Training College for Primary Teachers.

By this arrangement the education of teachers would fall into the right order. The training institutions with six classes, which perpetuate an exception, have only one advantage: They are not so costly, since one body is cheaper than two. But we must ask: Ought the question of money to turn the balance in this case? Thus everywhere, where the separation between School and the Training College is maintained, can the organisation, which in the light of the above parallels we must hold to be the correct one, be easily established. The advance made will show itself in the wider and more thorough preparation of the students before they enter the Training College and in the better technical equipment, which will consequently be imparted to them in the Training College itself.

(v.) The last aspiration, which has a bearing upon the education of the Primary Teacher, concerns the continuation of that education. This work, it is true, has been energetically taken in hand by the teachers, themselves, conscious as they are of the gaps which their previous training has left. The need for further education has found expression in individual cases, in free intercourse among teachers in the official conferences of the teachers of a district, in the foundation of reading circles and libraries. The Universities, too, have thrown open their doors for the purpose. Thus attendance at the University of Leipzig has been sanctioned, under certain limitations, by Ministerial Regulations of July 1st, 1865, and November 3rd, 1874, in the Kingdom of Saxony. Moreover University studies can be completed there after a two-years' course of study by means of an examination in the Theory and Practice of Education. In the Grand Duchy of Saxony, also, the University of Jena, with its Training College, has been accessible to aspiring Primary Teachers for many years past. All this has certainly been to the great advantage of primary and higher primary education in those States. The German Universities, in general, should follow the example thus set, and establish institutions through which helpful support might be assured to the continued education of the Primary Teacher. In this way a prospect is opened out equally favourable for the satisfactory training and for the professional career of the elementary school teacher, and such a prospect must be permanently secured for him if he is to be saved from the gnawing pains of discontent and from the loss of pleasure in the work of his calling. Equally necessary for

our school system are well-prepared, well-educated people for teachers in our Training Colleges, Headmasters of Higher Primary Schools, Inspectors of Schools, etc. By supplying the men for these posts, our Universities can associate themselves closely with the improvement of elementary education, while, if only on practical grounds, they must reject the request at times made of them to undertake the complete course of training of all Primary Teachers. It is impossible for our 21 Universities fully to perform the work which, at present, requires more than 200 Training Colleges. But if we keep to the solid ground of facts, the provision of a supplementary course of education for the Primary Teacher at the University is thoroughly desirable, and the possibility of its attainment is proved by the experience of years in Leipzig and Jena. This is the point at which we must apply our efforts. Would that Prussia, above all, might retrieve the opportunities so long neglected! A fair beginning has been made by the creation of Professorships of Education in Halle and Berlin, though these, at present, only serve the purposes of secondary education, as I have shown above. From these beginnings a higher and wider conception of the work of the centres of pedagogic instruction must develop itself in course of time, for it is impossible artificially to narrow our range of vision to the education of the upper classes, if we do but grasp the need for the education *of the people as a whole.*

The thoughts which are expressed in the preceding pages may be summed up in the following propositions:—

1. National education and the training of teachers stand in necessary connection with one another. The recognition of this connection guards us on the one side from impeding the education of elementary school teachers, on the other from wishing to advance it by precipitate action.

2. In close connection with the previous evolution of our educational system, a rational further development will be seen in our first demand, viz., that the character of the Training College for Primary Teachers as an institution for professional training should be more sharply marked than has hitherto been the case. This demand applies alike to the curriculum and the general life of these institutions.

3. A pre-supposition of this reform is a broader and deeper foundation of that general culture which, in this case as in all others, must precede the technical instruction for a definite calling. This must be our chief point of leverage, this is the most pressing claim made upon us by the present time.

4. Accordingly, the incomplete preparation afforded by the Prussian system must be set aside. Completion of the six-years' course at a Realschule must be claimed as the proper finish to a teacher's general education. Where, as in Saxony, the Training College with six classes has been erected, the introduction of a foreign language, either English or French, into the curriculum is a necessary reform—in some cases already effected

5. In order to give primary teachers the opportunity of supplementing their education, the Universities should be open to them, as has long been the case in the Kingdom and Grand Duchy of Saxony.

The resolutions of the "National-sozial Verein," at Erfurt, in September, 1897, laid down the following principles, corresponding with those already set forth.

"A. We claim for Primary Teachers, whether men or women—

1. As meeting their aspirations: A better education, *i.e.*, preparation at a secondary school, training in a Professional Institution, an opportunity of continuing their studies at the University. (Establishment of Seminars for the study of education, with practising schools attached, at Universities.)

2. As workers: (*a*) The guidance of trained experts, *i.e.*, the complete abolition of any oversight exercised by members of any other profession, an expert inspection, in all cases. (*b*) A seat and vote by popular election on the body of School Managers.

3. An income sufficient for their needs and a proper social position, *i.e.*, equality of financial and social conditions with the subordinate ranks of the Civil Service.

B. We claim for teachers of higher schools complete equalisation of financial and social conditions with magistrates."

Questions of Organisation in our School System.

State, Church, District, Family.

A proper training for our teachers forms the guarantee for a proper system of popular education. The latter condition is universally considered a necessary pre-supposition of national strength and prosperity, and above all, in our times, an essential means to the enjoyment of social peace. Both objects appeal strongly to us—National Power and Social Health. The question, therefore, is frequently raised and discussed: What can be done by popular education to raise the national and economic conditions of the people? What can it contribute to the abolition of the evils of society?

It is generally recognised that our Public Elementary Schools have striven, since the Napoleonic wars, to implant a love and enthusiasm for our country, its history, and development, in the hearts of their pupils. It is recognised also that our system of technical education, devised in the service of the various commercial and industrial occupations, has reached a high degree of efficiency, and is unceasingly trying to attain a yet higher standard.

The case is different, however, on the social side. The school has kept pace nobly, as we said, with our industrial life. But has it kept pace with the changes which social life has undergone in the course of the century? This question has raised a strong movement, not merely among persons more immediately

interested in education, who, under the cry of "Reform for the "Schools," have propagated its influence even in the highest quarters. All political parties alike have adopted from the claims made certain points which answered to their views. Hence have come into existence an extraordinary variety of programmes of educational reform, reflecting the discordant ideals of life of their different promoters, and necessarily incompatible with one another. While the adherents of the Roman Catholic Church regard the school as an ecclesiastical institution, and would emancipate it from State control, the majority of our people range themselves on the side of those who look upon the school as a political institution. It may be said at once, however, that a complete domination by the State is not desirable in this sphere. Such control degenerates only too easily into a bureaucratic treatment of educational affairs, which is absolutely unendurable. All spiritual organisations demand a certain freedom, if they are to reach maturity. Every regulation, which is issued in this sphere, must count on an inward agreement and sympathy of the governed, if it is to become a reality, and not merely so much waste paper. The co-operation of the parties interested is the best way to ensure a healthy life and steady progress. The interested parties, with whom we have to deal, comprise *the State* and *the District*, which both desire to possess good men and women as citizens, *the Church*, which has a strong interest in the religious education of the young, and *the Family*, to which children primarily belong, which is most keenly affected by their success or failure, and which, therefore, can claim the most original and natural right to supervise education.

However indisputable this may be, the course of events has, among us, produced, as a general result, a state of things in which the State has more and more taken under its control the business of public education, and by that means repressed the influence of the Family. We can speak quite correctly of a thorough-going centralisation, based on the support of a bureaucracy. The District and the Church have, it is true, been taken into partnership. To the former has been committed the provision of external necessaries (school buildings), and the undertaking of various services connected with schools; to the latter a large share in the work of inspection, with a view to economy in the multiplication of officials, and the moulding of education on Church lines. School inspection by clergymen has now been largely abolished in the smaller States. In Prussia, however, the arrangement still continues, though it has in many ways hindered the development of the School, and has called into existence and intensified an estrangement between Church and School, Clergy and Teachers.

A rational system of school-organisation must promote social reconciliation, and will, therefore, be primarily founded upon a just consideration of the claims which the individual parties interested have the right to make.

The proper course is, in all essentials, to be found in a sound policy of decentralisation, according to the method which has already been introduced with good results in the smaller Ger-

man States, and which is capable, in some points, of still further extension. By that means we make the principle of "self-government" hold good of our school system. We may indicate this by an incomplete sketch. The representatives of the families of a given school district or commune are united in a committee; from representatives of such committees, again, a school synod is formed. On this method, proper weight is given to the family. Our public educational system is raised by this participation of the representatives of the family to a really common and public institution, and is removed from the dangers of a frequently one-sided officialism. By its closer connection with life, it wins fresh life for itself. With the recognition of the rights of the family is maintained, not merely the principle of self-government, but also that of freedom of conscience. The strife of political and religious parties for the school is abolished, if it is thrown upon the families to decide in what spirit their children are to be educated, and what religious character the school instruction is to bear. From our point of view we are bound to disclaim all compulsion in religious matters, and, as a consequence, all compulsion with reference to the religious education of the young on the part of the State. Such compulsion, however, is actually practised, if official recognition is reserved, whether on the one hand to the Denominational school as the normal type, or on the other hand to the Undenominational as the only right form of State School. The families alone can decide this point in the spirit of Protestant freedom. They have to determine whether they wish their children to be educated and instructed (i.) in Denominational or (ii.) in Undenominational schools. Even then the right must be given to all who dissent from the prevailing wish, to unite in order to found schools of their own. The principle of "Respect of the Family" involves, therefore, Freedom; Freedom of conscience and independence in the management of the school. By no other method can we arrive at a fair and peaceable adjustment in our educational system. To such a plan the objection is often raised that the Families are, as yet, not ripe for such participation; that of their own motion they refused to co-operate in the work, from the consciousness that the schools have hitherto been admirably managed by the State. They say, "There are proper officials for that purpose; they have already done everything that is necessary." They themselves would rather remain out of the game. This is the view of an "indifferentism," which tends specially to prevail in a country where there is no play of opposing creeds, and where a capable body of State officials is solicitous for the improvement of the educational system.

But such an attitude on the part of the family towards the important things of life is clearly not to be considered as an ideal or a condition to be prolonged. Therefore our aim must be to rouse the conscience and to point out the tasks which every thinking and active citizen must take upon himself in this world, and to bring into prominent relief the duties which he has here to fulfil.

Another objection takes the point of view that the undenominational school is the only proper model. In this alone, it is argued, differences of creed are bridged over, and it is, therefore, the only form of school worthy of our efforts in a district of various creeds. We recognise this, if it rests upon a demand from Catholic and Protestant parents in common, if conditions of practical expediency recommend the adoption of this form in small districts. But we maintain an uncompromising opposition to it, if it is to be put forward as the only State school. We cannot agree in the least with such a compulsion of religious belief.

I must, therefore, repeat: There is only one way—viz., to throw on to the families the right of choice, and with that measure promote a wholesome education, leading to greater independence and strength of character.

Our schools have been rightly called the centres of spiritual nourishment. Among them the Primary School takes the most important place, since the greatest part of our children (90 per cent.) gains its spiritual food from it.

We must, therefore, in the first place, insist on a well-appointed Primary School of appropriate form, and one which is accessible to all. It must be so erected as to serve the purpose of an institution powerful for the promotion of social health. This is one of the most pressing demands of our time, especially from the standpoint of Christian ethics. As it is, the Primary School, even to-day, is in many ways regarded only as a sort of School for the Poor, just good enough to impart the necessary minimum of knowledge and ability to the children of the masses. We must break once for all with this inhumane and un-Christian conception. Against it we place a demand to have one universal Primary School, established for all children of every class. Let it form the common foundation, the broad support of our whole educational system. Let the ideal of the connection between all the members of our people, the ideal of the organised construction of a united system of Schools, attain a living expression in this reform. Such an institution is well suited to bring about reconciliation between the different classes of society, and on that ground we place it in the fore-front of our demands.

What are the objections to it?

1. "It is no good.' We shall be told, "Life is stronger than the School." True! We must not expect too much from it. The United States of North America possess this common basis of education, and in a very extended form, yet in that country the line between rich and poor, superior and inferior, is admittedly drawn with great sharpness.

Of this, however, there can be no question: Granted that Life may always bring about social divisions, which will be marked with some sharpness, the School is certainly not called upon to intensify these divisions by its work. Like the Church, the School has as its primary task the duty of attempting to emphasise the purely human element, to work as a reconciler, to check, so far as possible, the tendency to division, and proclaim

loudly the ideal of union among all members of a nation. On this ground we demand a universal Primary School. It is our desire that the differences, necessitated by the division of labour, should not be introduced until the sphere of work in which the child is to be placed, according to his talents, can be clearly seen. The preparatory departments attached to secondary schools must be abolished.

I am able to express myself thus briefly upon these questions, as I can count upon complete agreement with my views in Germany. I need only mention that the Prussian Minister of Education, Dr. Bosse, is a warm supporter of the common Primary School, that the whole body of German elementary school teachers have inscribed this demand upon their banners for the last ten years, and that the common Primary School is already a reality in Bavaria.

2. But yet another objection is raised against it. In the light of psychology it is urged that children of very various natural endowments cannot be instructed together. This is quite correct. Among the newly-admitted scholars of the different classes there does, at first, exist a great difference in mental capacity. Apprehensions have also been expressed of differences in morality. This, however, is a prejudice. Riches do not necessarily involve goodness, or poverty, evil. But how are such differences in culture, which owe their origin to the education in the period preceding school life, to be overcome? They may certainly be mitigated by the foundation of national Kindergarten Institutions for the children of the poorer classes. But another and graver difficulty arises. We claim for the family the right of free choice in the province of education. How, then, if rich and superior families reject the common Primary School? We can do nothing but give them perfect liberty; we cannot bring direct compulsion to bear upon them. Perhaps it is the circumstances at present accompanying our Elementary Education which prevent these families from entrusting their children to the Primary School. Their refusal can in that case be best met by a thorough amelioration of the institutions in question. Great advances are necessary, especially in the province of school hygiene, if reasonable demands are to be completely satisfied. I will mention only one point. Overcrowded classes must be once for all abolished. The maximum number of scholars in a class should be 40, while at present it reaches 80. It is just this smaller number of scholars in private schools which acts as an attraction in the opinion of parents of higher social standing. To make the blessings of a common Primary School really felt the time spent at it should not be cut too short. Three years are insufficient; a five years' period of instruction is much more favourable.

The demand for free education, and for a free provision of books and materials in the Elementary School, is based on the idea of lightening the burdens of our poorer classes (a work which should not, indeed, be undervalued), and of thus making some contribution towards social readjustment. Again, great assistance is given to the course of instruction by the abolition of

the irregularity and inequality in the provision of books, etc., frequently caused by the poverty of the poorer scholars and the cause of much unnecessary toil and vexation to the teacher. Thus, the demand has a theoretical and practical side, both of which speak in its favour.

The objection may, indeed, be raised, that the *rights* of parents are to be strengthened only by a corresponding increase in their *duties*, and that it is in the interest of education not to weaken the sense of duty among parents. This may be perfectly correct, but my opinion is, that even after the abolition of school-fees, and of charges for books, etc., parents still have quite sufficient duties to perform for their children. It has been urged, again, that children will treat the books, etc., given to them, with less care, as their parents' control will be wanting. There is certainly a danger here, but it must be, as far as possible, nullified by the influence of the teacher acting in conjunction with the parent.

The interest of society, as a whole, appears to me to be the all-important point which should guide our views on this subject. It warns us against rash generalisations. As we pre-supposed the introduction of a common Primary School, the children even of the richest parents will participate in free education. This appears to me, I must admit, to be an absurdity. The demand should only be allowed in the case of all those classes for whom *free* education may be a necessity. To those classes belongs, primarily, everyone who is exempt from the direct Income Tax. One might well go further and extend the right of free education to the lower ranks of Income Tax payers. I only oppose the support from public means of those who have absolutely no need of such help.

Besides the foregoing claims, we put forward the additional demand that gifted children of poor parents should receive sufficient support from public moneys to enable them to obtain a higher education, corresponding to their capacities. This may be already done in isolated cases; private beneficence has worked in this field, as in others; but here, as everywhere, not to a large enough extent. Such cases must increase, for new strength derived from the masses should always be passing into the directing classes, in order to replace the worn-out and degenerate. People do, indeed, maintain that no one should help to swell the number of the "educated proletariate." But we must take into account the fact that often enough children of very mediocre talents are pushed through the higher stages of education only by dint of the position and money of their parents, and it should merely be regarded as a compensation therefor if gifted children from the classes of scanty means are not cut off from their ambitions by their less favourable pecuniary circumstances.

If we bear in mind how many persons with considerable intellectual gifts are stunted by their straitened circumstances, how much force is thus lost to our nation, the provision of a ladder by which men of great abilities, but little means, can mount to higher callings and activities, appears to be imperatively demanded in the general interest.

Our fourth demand relates to the maintenance of *universal and obligatory* Continuation Schools. One has a perfect right to raise the question, whether all those who are bound to leave school at 14 years of age, in order to pursue their trade, should close the period of their education at that point; whether the equipment for their life, which the Primary School imparts, is to remain as their sole portion. This question we must answer in the negative However good the work of the Primary School may have been, on its moral and intellectual sides alike, it is still, and must remain, insufficient The period from 6 to 14 years of age is too short, and that from 14 till the entry upon military service is the very time which is most important in a young man's development. After leaving school, their confirmation once over, youths begin to take their own course, to move more freely. They experience a multitude of impressions, to which only too many succumb without further inquiry. That is a fact, and middle-class society recognises it, vents numerous complaints of the rising generation, with its craving for pleasure, its covetousness, its unbridled licence, and, with easy pharisaism, ascribes it all to that "atheistical seductive social democracy," but still *does* practically nothing to fill up the gaps, or to set any force in motion against the misleading influences.

How much better, in these points, is the position of children in the upper classes. Their course of education is properly directed, proceeds in uninterrupted tenor, under strict guidance and supervision, to its goal. But there is a yawning gulf in the education of the great mass of our nation. Between the Primary School and service in the Army, youths are left to themselves—at the most dangerous period of their life. Some regulating influences there are—the Church, private associations, and, in some smaller States, the State itself. But how insufficient all these institutions are, how few do they reach among all the mass of our young people! Even where Continuation Schools are at present in existence, the course is too short (it lasts only from the 14th to 16th year), and the time for instruction is too short (four hours, and that in the evenings). The moral influence is almost nil.

To sum up, we plead for the following reforms:—

1. The *Organisation* of public Education is the business of the State to this extent: The State should watch and exercise legislative control over the system as a whole. The system itself should be based upon the principles of freedom of conscience and constitutional self-government, in order to give opportunity for a real co-operation among all concerned—viz., the Family, the District, and the Religious Bodies. Thus the dangers of a one-sided educational bureaucracy will be avoided. Private Schools should be allowed under State-inspection.

2. We demand a common foundation for all schools in the form of a "Common Primary School," and the abolition of the preparatory departments attached to State or Municipal Secondary Schools. In order to make the common Primary Schools

possible, overcrowded classes must be stopped. The number of children in any class should not exceed 40.

3. We claim free education and free provision of the means of education, and, in addition, sufficient financial support from public moneys for talented children of poor parents, so that they may be able to attend secondary schools.

4. We desire on behalf of young men and women alike, public discipline and care, and a properly established Continuation School, *compulsory for all from* 14 *to* 18 *years of age*, a school which, besides promoting intellectual development, may also exercise a moral influence. The need for a yet more extended education can be met by University Extension Courses, Reading Rooms, Libraries, and Societies for the advancement of social well-being.

The Secondary Schools—Classical Schools and Non-Classical Schools.

The last Order regulating these Schools was issued in Prussia by the Ministerial Enactments of 1892. These were the outcome of the deliberations which were held in December, 1890, at the Education Department, in Berlin, and in which the German Emperor took part. A change was introduced by them, but no final decision was reached. No one is contented with them. Classical scholars, and conservative teachers in the Gymnasien, groan over the abridgment of the hours devoted to Latin in the gymnasium, and maintain that it was now impossible for them to attain the desired goal. The supporters of non-classical education are displeased to find that the education given by their institutions is still made of such small account by the State that privileges enjoyed by the schools which teach Latin, are still denied to schools which do not. Classical and modern education stand in conflict, but the former still holds the field. But the struggle is a hot one. Classical education loses ground step by step. There is a daily increasing tendency to curtail the use of Latin. This is apparent in all departments of life, including the School. Evidence of this exists in the fact that the so-called Reformed Gymnasien (Frankfort-on-the-Main, and elsewhere), are always gaining more supporters, and will to all appearances, be the schools of the future. The chief alteration consists in the arrangement by which instruction in foreign languages begins with French instead of Latin. Societies for educational reform advocate this arrangement (which establishes a common basis for Gymnasium and Real-Schule) with warm approbation and increasing success. There is, moreover, a demand, ever growing stronger, that both the higher kinds of schools—classical and non-classical—should enjoy complete equality of privilege, and that the equal value to be attached to classical and modern education should thus be openly proclaimed. The importance which classical training still possesses among our nation will only be clearly

shown when it is no longer propped up by privilege, but is placed in free competition with the modern education given in the Real-Schule. This view is undoubtedly correct. Anything that possesses life and strength in a nation, should have free play. It needs no artificial supports from the State. If it needs them, then it is no longer of real service to the nation's life. The old, then, appears more like a curiosity which is merely an inheritance handed on by the force of tradition, and is not grasped and won anew each day.

Wherever we look in Germany, we see a vigorous life, an eager effort to march onwards, without abandoning the positions that have been already secured. Let us cast a glance over our educational system as a whole. We observe, it is clear, a struggle to modify too strict a centralisation, brought about by historical development, through a rational decentralisation, so that everyone interested may take his part in the mighty work of national education. Looking at the training of teachers, we strive to make men and women competent for the difficult duties which the task of educating our people lays upon them, to equip them with knowledge, and to fill them with enthusiasm for the work which is to enable our future generations to accomplish, with increasing strength and clearer insight, those tasks in the civilisation of the world which Providence has marked out for the German people. The true statesman perceives that these tasks lie not so much in the realms of the visible as in the unseen realms of thought. For a season they may be lost sight of, through the struggle for existence among nations. But to secure their always shining forth through the dark clouds of material cares—this is the task of the educators, the advance-guard of the forces of the ideal.

To this noble task must the Universities be drawn more and more, as the fortresses of knowledge, including the science of the organisation of our National Education. The intellectual and moral influence issuing from them should penetrate the whole of our schools, which, organised in clear gradation, and with a sound division of labour, will draw ever onwards the future workers of the German Nation, in cottage and in palace. We are, politically, quite a young people. We have only been united since 1870. Everything which we still lack in inspiration, intelligence, and vigour must be gained by hard, steady work for the coming generations. Thus the work of educating the nation, in whatever grade, high or low, gains enhanced importance.

Every individual should enjoy an education corresponding to his individual capacity; but all should be attuned in the same key, so as to be men and women, strong in character, noble in temper, and vigorous in action, citizens of an earthly empire, which through the education of its people would be ever more and more formed in the image of the Kingdom of Heaven.

(Translated by F. H. DALE, Education Dept.)

The Teaching of Modern Languages in Frankfurt a/M. and District together with some account of the Frankfurter Lehrplane.

In the paper on the Berlin Realschulen,* published in the volume of Special Reports on Educational Subjects, 1896-7, the Prussian system of secondary schools has been explained. But as it is impossible to appreciate the reform, discussed in the first part of this paper, without a clear understanding of the main differences between the four chief types of Prussian secondary schools, I may, perhaps, be allowed to allude to these briefly. It may also be advisable to give a slight sketch of the authorities by means of which the Government controls these schools. Nowhere are those centralising tendencies, and that spirit of collectivism, which are evident in all German institutions, more apparent than in the organisation of education. It is recognised on all sides that the education of the nation must be controlled by the State. This appears in direct opposition to our English individualistic principles, or at any rate to those principles which have determined the course of secondary education in England up to the present time. It certainly cannot be denied that the organised system of schools, common to all parts of Prussia, is in striking contrast to the state of affairs among us. Such a system implies a Central Authority very different from anything we are accustomed to.

The Prussian method of governing in matters of education is (1) by means of a strong and enlightened Central Authority. This Authority is composed, in large part, of men who have had long experience in grappling, in the schools themselves, with the many educational problems which can only be fully understood by those who are acquainted with the internal details of school management. At the same time these men are selected as having given evidence of that administrative ability and knowledge of affairs which is essential to the successful performance of departmental duties. (2) This Central Authority is kept in direct communication with the schools themselves by means of a Provincial Board of Inspectors in each of the various Provinces. This body is composed almost entirely of ex-headmasters. It is immediately evident from the constitution of these two authorities that they have perfect control of the whole system of education and, when composed as they are of men with high patriotic ideals, will guide rather than suppress the individual initiative of the school officials under them. Thus, while we find a common system of schools in all parts of the country, we discover in various towns and provinces different experiments in curricula, etc., being carried on with the sanction of the Government. As in the case of Frankfurt, these experiments have generally been suggested and devised by the schoolmasters

* Special Reports on Educational Subjects 1896-97. [C. 8447. pp. 375-403.]

themselves. The common system of secondary schools consists of the following four main divisions:—

(1) The Gymnasium, or classical school in which both Latin and Greek are taught, with a nine years' course.

(2) The Realgymnasium, in which Latin, but not Greek, is taught, with a nine years' course.

(3) The Oberrealschule, with a nine years' course.

(4) The Realschule, with a six years' course.

} in which neither Latin nor Greek, but only modern subjects are taught.

The advantages of this common system are too many to discuss here; for administrative purposes it is indispensable. I would merely point out the great facility it offers for any one who is making enquiries as to the German schools, whether he be a foreign critic or a parent about to decide on the best education for his son. In every large town there are found a number of school buildings, carefully planned and splendidly equipped, if not always externally elegant, each of which bears a distinct title, corresponding, for instance, to one of the above. On referring to the pamphlet containing the authorised Prussian curricula (or it may be the authorised curricula of a special town or district), one is informed of the general nature of the instruction supplied by each of these schools, and thus of its definite object in the education of the citizen.

The experiment I purpose dealing with in the first part of this paper is one which is being carried out in Frankfurt, and which is concerned with a remarkable reform in modern language teaching. It was inaugurated by the new Frankfurt curricula of 1892. These Lehrpläne affect directly only the Gymnasium and Realgymnasium.

I.

The classical schools in Germany, as in other countries, have been led, from utilitarian motives in the first place, to give an ever-increasing place in their curricula to what are known as modern subjects, and especially to modern languages. As would naturally be expected, the Gymnasien, proud of their position among the foremost classical schools of Europe, and true to their splendid educational traditions, resisted as long as possible the encroachments of the modern spirit. Gradually, however, they have been obliged to give way. The result of the struggle of these two opposing forces had been to pile up between them a mass of subjects, which it was impossible for any boy to master in the years of his school life. And in spite of the carefully organised system of schools, described above, it was found that the curriculum of the classical schools was overcrowded, the renunciation on the part of the classicists of certain parts of the time-table not being proportionate to the claim of the "moderns." This overcrowding was first discovered by the medical men, who cried out that the general health and physique of the boys attending these schools was suffering. Where there

is an active authority presiding over the educational interests of the nation, such a complaint immediately makes itself heard. It is not merely the futile protest of a few scattered individuals, who have no means of uniting in a direct appeal to a supreme power.

It was evident that this strain had to be removed, and the Frankfurt authorities set about solving the problem in their own way. It was recognised that the school hours must be reduced, but that as far as possible the reform should consist of a readjustment of educational forces, rather than of the elimination of several. At the same time it was urgent, in the interests of the nation as a whole, that more time should be devoted in the classical schools to the study of modern subjects, and especially of modern languages. The results arrived at are embodied in the new Frankfurter Lehrpläne, which received the ministerial sanction in November, 1891, and came into force in 1892.

The Frankfurt authorities claim that they have solved the difficulties alluded to, by postponing the commencement of Latin in the Gymnasium and Realgymnasium to the fourth class from the bottom, and that of Greek in the Gymnasium to the sixth from the bottom.

As stated above, the new curricula affect directly only these two types of schools, and they will be discussed here chiefly in connection with the Gymnasium, both for the sake of simplicity and because a similar change was carried out in the curriculum of the Realgymnasium* in another town at an earlier date. They indirectly affect the Latin-less Realschulen and Oberrealschulen, however, in a most important manner; they provide that the three lowest forms of all Secondary Schools shall furnish a common basis of instruction. The practical advantage to be gained by such an arrangement is immediately evident: a boy has the opportunity of being transferred from one kind of school to another up to the age of twelve or thirteen, without spending three years in the elementary study of subjects for which it is then discovered that he has no natural taste. All authorities agree that it is not possible for an average boy to show any decided bent before this age.

But if this were the only benefit to be derived, it would be doubtful how far it is sufficiently important in itself to justify the Frankfurt schools in postponing the commencement of Latin and Greek to the higher forms. They have still to satisfy those authorities who hold that "for their due success classical studies

* The Realgymnasium, with Latin but not Greek, is a type of school which recommends itself to many English classicists, who seem to have an idea that by the sacrifice of Greek they will appease the modern monster. I am inclined to agree with the opinion expressed in Vol. I. of "Special Reports," that the Realgymnasium is going somewhat out of favour in Germany. To an outside observer it seems a significant fact that the headmaster of a Realgymnasium in a town I visited had until recently been the director of a neighbouring Latin-less Realschule, and is one of the most enthusiastic leaders in the reform of modern language teaching. Such an appointment must tend to still further modernise this semi-classical type of school.

must be begun at an earlier stage of school-life than such a scheme would allow." If they cannot offer good reasons for differing from this opinion, expressed by the December Conference of 1890 it would be inexcusable in them to consider the small minority of boys, who are transferred from the lower classes of the Gymnasium or Realgymnasium, to the disadvantage of the great majority who remain in these schools to reap the benefits of a classical or partly classical education.

They defend the reform they have introduced, however, on the highest educational grounds. It is all the more interesting and worthy of the attention of English educationists in that it provides for that fusion of classical and modern education advocated by certain authorities in our own country.* In commissioning Dr Karl Reinhardt, the eminent director of the Goethe Gymnasium to write the Introduction to the new Frankfurter Lehrpläne, the educational authorities of that town have placed their cause in the hands of an able advocate. He has expressed the views of those whom he represents in a learned and convincing manner, and yet with a moderation which is unfortunately too often wanting in educational controversy. The influence of that party, which more particularly concerns itself with the reform of modern language-teaching, may plainly be traced in this Introduction. It is proposed to give here a brief sketch of the various causes which have produced these curricula.

The Germans have at present no intention of giving up their classical schools. They have too great a faith in the humanising influence of the study of Latin and Greek. But they are fully alive to the fact that it would be fatal to bring up any section of the nation as strangers to the modern spirit, and to those influences which have produced and are still moulding neighbouring nations. They therefore turned a deaf ear to the suggestion that the over-strain referred to might be avoided by confining the education in the Gymnasium within a strictly classical sphere. The supporters of this proposal held, on their side, that "it would be better for a few individuals to devote themselves, of their own free will and in accordance with their natural taste, to the study of classics, and, becoming imbued with the spirit of antiquity, act as a civilising leaven on the whole nation, than that a large number of boys should be mechanically drilled in the elements of Latin and Greek."

Of course there were extremists who wished to see classics thrown over altogether. But had public opinion ever been in favour of such a step, it was impossible for the Gymnasium to break suddenly with its educational traditions, owing to its connection with the Universities and to its position as the only school preparing for the learned professions. It remained therefore for the authorities to provide a proper correlation, based on the highest educational principles, of the various subjects which they were obliged to include in the curriculum.

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* *Cf.* "Organisation and Curricula" by Mr. Pollard, Head Master of the City of London School, in "Teaching and Organisation" (Longmans, Green, & Co., 1897).

In the first place, it was evident that the number of school hours must be reduced; and, so great was the feeling of the importance of modern subjects, it was decided that classics alone must bear the loss incurred by this reduction. The problem then immediately presented itself—how were the curricula to be constituted so that classical education should not suffer from the decrease in the number of hours devoted to it? To solve this problem the Frankfurt authorities had to reconsider the whole question of language-teaching. In fact, the reform may be said to consist entirely of a re-arrangement of the position of languages in the Lehrpläne, in such a manner as to meet the demand for the more thorough teaching of modern languages.

Experience had shown that a boy of nine or ten, entering Sexta (the lowest form) of a classical school, attacked the new study of Latin with great vigour and eagerness, which, however, gradually diminished as he advanced. It was not before reaching the higher forms that he really began to understand what he was doing and the reason for doing it. So that between the third and the higher forms he passed through a period of hard and depressing struggle, which exercised an undesirable influence on his intellectual powers; and, even when he had arrived at the higher stage, he had forgotten so much of his elementary work that it was impossible for either pupil or teacher to continue the study with enthusiasm. This, it is held, was entirely due to the deductive method of teaching employed in the lowest classes; or, in other words, was owing to the pupil's being introduced to the study of Latin through the channels of grammar. Consequently the first conclusion arrived at was that, whatever language had to be learnt in the lower classes, it must be taught mainly on empirical and inductive* lines—that is to say, a young beginner of nine or ten must learn a foreign language, as far as possible, in the same way as he learns his mother-tongue. Could any method be discovered by which the teaching of Latin would be made to comply, in some degree, with this requirement? The one employed in Germany until the present century offered itself.

As late as the eighteenth century, and even the beginning of the nineteenth, Latin had been the common language of the learned of all European nations. The teacher could speak it fluently, even if the counsel of Melanchthon, that nothing but Latin should be heard in the schoolroom, was not strictly followed. Boys learnt to speak this language by committing passages to memory, and by reproducing and imitating those they

* The term "inductive" is somewhat misleading. It would seem to imply that, with such methods of teaching, modern languages offer no opportunity for that invaluable training in deductive reasoning. This is, of course, not the case. A better term would be the "scientific" method. By the old "deductive" method a pupil was called upon to accept as beyond dispute, on the authority of a teacher or book, certain rules of grammar and syntax, which thus demanded no exercise of his own reason, and were generally beyond its grasp. By the "inductive" method the pupil (necessarily under the guidance of the teacher) forms rules for himself from the facts which have entered into his experience. In the application of these rules, and in the very process of forming them, deduction is perhaps the most important factor.

had read, *not* by translation into the foreign language, nor by continual comparison with the mother-tongue. But now that Latin has lost its position as the international language, scholars approach it in a different spirit. It is no longer their sole object to write it elegantly and speak it with eloquence. Teachers and professors have ceased to meet to hold discussions in this language. It is therefore impossible for the schoolmaster to teach his pupils Latin conversationally when he cannot speak it himself. And it would also be impossible, not to say absurd, to adapt this language to the conditions of modern life. This was done in the last century, and to such an extent that an advanced Latin scholar of the present day would cut a sorry figure if he had to pass an examination in the vocabulary of a "Sextaner" of that period. Everyone knows how greatly German literature suffered from this artificial use of Latin. Such, shortly, were the chief reasons for arriving at the conclusion that, under existing conditions, it was impossible for the young beginner to be taught this language in an empirical and "natural" manner. Now, it was held that, in studying a classical language, so different in every way from German, the pupil is obliged to ponder over the various and often contradictory meanings of words, to analyse the construction of sentences, and continually to compare these with the corresponding forms and expressions of his mother tongue; in short, to bring into play all the most important elements of thought-activity. The classical languages, which exist in a state of final development, are considered by some authorities to offer opportunities for such exercise of the intellectual functions in a higher degree than any other educational subjects. But it was said that a boy who, having passed the first three years of his school life in the Volks- or Vorschulen, entered the lowest form of the Gymnasium, or Realgymnasium, at the age of nine or ten, was not yet ready to derive full benefit from such studies: he could not be capable of an intelligent appreciation of the laws that govern language. He must wait until his intellectual powers were more mature, he must in the meantime undergo a careful preparatory training, and, when he did arrive at this stage of his education, be able to bring all his energies to bear upon it, and not be harassed by similar difficulties in the elementary study of kindred subjects. Such, briefly stated, were the chief arguments advanced for the postponement of Latin. It only remained, therefore, to decide whether English or French should be the first language studied; for the majority of authorities were agreed that two foreign languages should not be begun simultaneously in the lowest forms. In making the choice it had to be borne in mind that the pupil would proceed, through the study of the language selected, to that of Latin. Naturally the decision was in favour of French, a language which may be said to occupy a position midway between German and Latin, a link being formed on the German side by its construction and simplicity of inflection, and on the Latin side by the many qualities which as a romance language it directly inherits

from Latin.* It will be seen from the accompanying copy of the Frankfurter Lehrpläne that, in accordance with these conclusions, French is the only foreign language learnt during the first three years, six hours a week being devoted to this subject in Classes VI., V., and IV. of the Gymnasium and Realgymnasium. It will be noticed, however, that in both schools a very considerable proportion of the hours per week in all succeeding forms is monopolised by Latin. Still the total loss of time which Latin suffers, compared with former schemes, is by no means insignificant. But it is held that this is more than compensated for by the lasting impression that a concentrated study during a shorter period creates. It is outside of my province to discuss here the actual teaching of Latin in Frankfurt; but, as all educationists must be interested in the results of this experiment, I will refer them to the interesting lecture delivered by Dr. Reinhardt in Munich, in which he gives a very striking account of the remarkable progress made by the boys in his own school, who were able to read six books of Cæsar's Gallic War in their second year.† He explains fully the method employed. In the Gymnasium Greek is not begun until two years later—namely, in Untersecunda. In the Realgymnasium Greek is replaced by English.

The only language, therefore, which a boy learns in the lowest classes of the Frankfurt classical schools is French. If this is to be taught in the most natural manner possible the first requirement is that the teacher should be able to speak French fluently. Were this enforced in English secondary schools many of those at present engaged in teaching French to the younger boys would be immediately disqualified. We are thus, at the very outset, obliged to admit the superiority of this system over that still in vogue in many English schools. Not only is the blunder of entrusting the education of beginners to an untrained teacher a thing of the past, but the master possessing a merely amateur acquaintance with modern languages, who in England is often told off to teach these to the lowest classes, in Germany is not recognised by the profession as a modern language teacher at all.

The following is the broad outline, suggested in Dr. Reinhardt's Introduction, of the method to be employed in teaching a beginner French: the limits defined are such as to allow a great deal of freedom to the individual teacher; in fact they may be

* Some schools in the north of Germany begin with English, on the grounds that this language is more akin to German. As, however, there is no English taught in the Gymnasium, except as an optional subject, this arrangement would make it impossible to establish a "common basis" in the lowest forms of all secondary schools. In English schools the question would have to be considered from an English point of view; such authorities as Locke and Benjamin Franklin were in favour of beginning with French, but a very good case is made out at the present time for the German language; its claims cannot be ignored.

† Mitteilungen des Vereins für Schulreform in Bayern. Nr. 7. April, 1897. A well-known German authority stated at the meeting of the Verein für neuere Philologie (held in Leipzig, November 9th, 1897), that, when visiting the Frankfurt Gymnasium last summer, he found the boys in Untersecunda reading unprepared passages of Ovid "mit raschem Ueberblick und gutem Verständniss."

said to have been so fixed as to include all modern methods recognised as sound by the German authorities :—

(1) The pupil is to be made familiar with the spoken sounds of the language.

(2) He is to be taught to speak about the objects which surround him, in their connection with his daily life.

(3) He is to be taught the written language, and particularly to read it.

*(4) He should then begin translations from the foreign language into the mother tongue, reproduction and repetition.

(5) The pupil to arrange, under the teacher's guidance, the linguistic phenomena he has met with, according to the accepted system of classification.

It is hardly necessary to draw attention to the fact that, according to this outline, the teaching of grammar is not the initial step. The pupil, having become acquainted with the structure of sentences, is led by the teacher in a systematic manner to formulate rules; formerly he proceeded from the abstract rules to the construction of sentences. Speaking broadly, by the latter method, still commonly employed in England, the pupils are taught a large amount of theory, to be put into practice when they go abroad, but unfortunately the majority of them never do so in time to profit from such teaching; by the former method they are taught to speak the language, so that, whether at home or in the foreign country, they will be able to converse with the foreigner and understand his literature. This is considered the first object to be attained, but, at the same time, it is of the utmost importance so to adapt this method that the teaching of modern languages may be productive of its maximum force as a means of education. It will be seen later on how far this is done. Before entering into further details, however, as to the manner in which this method is carried out in some of the Frankfurt schools, there are a few points concerning the teachers themselves worthy of remark. In the first place, they are all Germans. Attention is drawn to this fact because many English parents still imagine that their children must learn a foreign language from a foreigner, and that the contact with anything but a Parisian or Hanoverian accent is fatal to their future command of French or German. The Germans, on the other hand, know that a boy cannot possibly be taught at school to speak a foreign language perfectly: that an absolutely correct pronunciation, a complete acquaintance with the idiom, can only be acquired, with permanent results, by residing in later life in the country where the language is spoken. They therefore support the opinion of their educational authorities, that their boys can be best taught what is requisite and of greatest importance by their own countrymen, who have been trained in the methods approved in Germany, are in thorough sympathy with their pupils, and able to introduce them to the life and ways of other nations as

* The question of translation, and the reasons some authorities have for *objecting to it*, is dealt with on p. 479.

no foreigner can do.* It is an error to imagine, on the other hand, that the German talks the language he teaches so as to be mistaken for an Englishman or a Frenchman. It generally struck me that the English of the majority of these masters was superior to their French. This was not only owing to the closer affinity of English and German. The greater number of the teachers of French seemed to have acquired, or, at any rate, to keep up their knowledge of this language by visits to Switzerland rather than to France. The causes are not far to seek.

As for the teachers of English, until quite recently, we have been providing the expenses of their residence in this country. A German had only to accept the position of language master in an English school, and in a short time he had sufficiently perfected himself in the English tongue, learning it chiefly, thanks to our methods of teaching, from his pupils in the class-room. Now that it is yearly becoming more difficult for foreigners to obtain masterships in English schools, the expenses of a residence in England have to be provided for in other ways. For instance, I met a teacher in one of the Frankfurt schools to whom the municipality was granting £50 to enable him to spend six months in England, his salary being continued to him during this period, and a master being paid to replace him. This gentleman was already a trained teacher of some experience, and consequently he would know exactly how to spend these six months most profitably—a fact particularly worthy of notice. The salary of the modern language teacher in Germany is considerably above the average paid to a master in England, and his scholastic position is in every way superior. All the masters I had the pleasure of meeting seemed to be thoroughly alive to the seriousness and importance of their profession. Most of them were enthusiasts with the same respect for the science of education that a doctor, for example, has for that of medicine. No one could come into contact with these men without immediately perceiving the secret of their success. They never spare themselves, and the remark, that the methods they employed were exceptionally trying for the teacher, once elicited the reply that their country had the right to demand their utmost efforts in the interests of the rising generation.

II.

There are several points in the following Lehrpläne which are particularly worthy of attention. The figures in the first nine vertical columns represent the school hours per week devoted

* A director, of wide experience, expressed himself as follows on this matter:—"The foreign masters we have had in Germany were not able to obtain in any way better results in pronunciation and idiomatic accuracy than their German colleagues who had mastered the foreign language." For a fuller discussion of this question, see my paper in this volume on "The Teacher of Modern Languages in Prussian Secondary Schools."

in each class to the various subjects. The last vertical column gives the difference between the two preceding columns, that is to say, between the present and former total number of hours devoted weekly to each subject throughout the whole school.

In the Gymnasium there is a total increase of ten hours in the mother-tongue (including the narration of national events), of nine hours in French, of three hours in arithmetic and mathematics, and of two hours in drawing. On the other hand, there is a total decrease of twenty-five hours in Latin, of eight hours in Greek, and of four in history and geography (compensated for by the additional hours given to the narration of national events). It will be noticed, however, that the total increase in certain subjects does not correspond with the decrease in others, the total reduction of hours per week throughout the whole school amounting to thirteen.

Turning to the curriculum of the Realgymnasium, though there is a total reduction of twenty hours, the total number of hours per week throughout the whole course is greater than in the Gymnasium; and, though Latin is the only classical language taught, twelve hours less are devoted to it weekly than in the Gymnasium. In Untertertia, the first form in which Latin is begun, ten hours a week are allotted to this subject in the Gymnasium and only eight in the Realgymnasium. It is interesting to compare the time given to French and to English in B. The subjects and hours in the three lowest forms (VI., V. and IV.) practically correspond to those in the same classes in the Latin-less Realschulen and Oberrealschulen, thus forming a "common foundation" as is stated in the heading.

NOTE.—On visiting different parts of Germany, since writing the above, I find that the Frankfurt experiment is being watched with deep interest. Many authorities consider that the reform will ultimately be introduced into all German schools. There appears to be a strong feeling in England that we need a school corresponding to the Realschule; it is owing to the want of such a school that the demand, in opposition to all true educational progress, has arisen for commercial secondary "education." If a new side, of the Realschule type, is to be grafted on to our existing secondary institutions it can, at any rate, be accomplished satisfactorily by means of the Frankfurt reform. The curriculum of the lower forms of the Bradford Grammar School has recently been remodelled on these lines; more time, however, is given than in Frankfurt to the study of the mother tongue and mathematics.

Lehrpläne

für das Gymnasium und Realgymnasium

mit gemeinsamem Unterbau

der drei unteren Klassen zugleich für die lateinlose Realschule

A. Gymnasium.

	VI	V	IV	IIIb	IIIa	IIb	IIa	Ib	Ia	Sa.	bisher	Änderung
Religion . . .	3	2	2	2	2	2	2	2	2	19	19	± 0
Deutsch und Geschichtserzähl.	5	4	4	3	3	3	3	3	3	31	21	+ 10
Latein	—	—	—	10	10	8	8	8	8	52	77	— 25
Griechisch . .	—	—	—	—	—	8	8	8	8	32	40	— 8
Französisch . .	6	6	6	2	2	2	2	2	2	30	21	+ 9
Geschichte und Erdkunde .	2 Erdk.	2 Erdk.	5	3	3	2	2	2	3	24	28	— 4 (i. Deutsch)
Rechnen und Mathematik .	5	5	5	4	4	3	4	4	3	37	34	+ 3
Naturbeschreibung	2	2	2	2	2	—	—	—	—	10	10	± 0
Physik . . .	—	—	—	—	—	2	2	2	2	8	8	± 0
Schreiben . .	2	2	—	—	—	—	—	—	—	4	4	± 0
Zeichnen . . .	—	2	2	2	2	—	—	—	—	8	6	+ 2
Summa .	25	25	26	28	28	30	31	31	31	255	268	— 13

DRILLING AND GYMNASTICS: VI—I: 3 hours.

SINGING: VI and V: 2 hours for boys "with voices," 1 hour theoretical instruction for all boys.

IV—I: Chorus singing, two lessons of ¾ hour each for boys "with voices," who have been through the course for VI and V.

OPTIONAL SUBJECTS: Drawing: II and I: 2 hours.

English: } IIa and I: 2 hours
Hebrew: }

B. Realgymnasium.

	VI	V	IV	III$_2$	III$_1$	II$_2$	II$_1$	I$_2$	I$_1$	Sa	bisher	Änderung
Religion . . .	3	2	2	2	2	2	2	2	2	19	19	± 0
Deutsch und Geschichtserzählung	5	4	4	3	3	3	3	3	3	31	27	+ 4
Latein	—	—	—	8	8	6	6	6	6	40	54	— 14
Französisch . .	6	6	6	4	4	3	3	3	3	38	34	+ 4
Englisch . . .	—	—	—	—	—	6	4	4	4	18	20	— 2
Geschichte und Erdkunde	2 Gesch	2 Erdk	5	3	3	3	3	3	3	27	30	— 3 (Deutsch)
Rechnen und Mathematik	5	5	5	4	4	4	5	5	5	42	44	— 2
Naturbeschreibung	2	2	2	2	2	—	—	—	—	10	12	— 2
Physik . . .	—	—	—	—	—	3	2	2	2	9	12	— 3
Chemie . . .	—	—	—	—	—	—	2	2	2	6	6	± 0
Schreiben . .	2	2	—	—	—	—	—	—	—	4	4	± 0
Zeichnen . . .	—	2	2	2	2	2	2	2	2	16	18	— 2
Summa .	25	25	26	28	28	32	32	32	32	260	280	— 20

Drilling and Gymnastics and Singing as in the Gymnasium

III.

I must express my obligation to the Foreign Office for obtaining for me, through Her Majesty's Ambassador at Berlin, the necessary permission to visit schools in Frankfurt and the neighbourhood towards the end of August 1897. My thanks are also due to the directors of the various schools mentioned in this paper for the kind and courteous manner in which they received me. I should like to take this opportunity of stating how greatly I am also indebted to Herr Walter, director of the Musterschule, and one of the most celebrated modern language teachers in Germany. He allowed me the free run of his school, and he gave up much of his time in order to supply me with preliminary explanations and to arrange interviews with gentlemen who would be able to assist me in my inquiries. Much of the information given in the previous pages could not have been collected without his help and advice.

As already implied, the rough outline given above of the method employed in the Frankfurt schools consists of the broad principles, on which the majority of the authorities are agreed. One is, therefore, naturally prepared to find the different tendencies, representative of each of the three different types of schools, strongly marked in their several developments of these principles. In the Gymnasium, which as before stated provides a classical education, the idea is never lost sight of that the study of French should be preparatory to that of Latin. In the Realgymnasium, judging from my own experience, the opinion seems to be that those special powers, which can best be developed by the study of a classical language, are sufficiently exercised by the teaching of Latin in the higher forms, and that French can therefore be studied more for itself. In the Realschule and Oberrealschule (Latin-less schools) the necessary cultivation of these faculties must be supplied by modern languages alone; but the analytical study of these is deferred to the higher forms, when the boys have already collected sufficient material to enable the teaching of grammar and syntax to be carried out according to the "inductive" method.

These three tendencies will, I think, be evident from the following account of some of the lessons I witnessed in different schools. The description of one in the Hanau Oberrealschule is offered as a striking example of what may be termed the more utilitarian aim in the teaching of modern languages.

French Lesson in Quarta of the Goethe Gymnasium, Frankfurt*

Forty-six boys were present. This class had been learning French for two and a-half years, so that they were within a few months of the commencement of Latin. Six hours a week are devoted to the study of French during the first three years. This was the nearest approach I saw to that form of teaching most usual in English schools, *but* the whole lesson was conducted

* There is no need to state the average age of boys in a form, if it is remembered that a boy enters Sexta (the lowest form) at the age of nine or ten, and, in the ordinary course of events, is moved up one form at the end of each year.

in French, from the calling over of the names to the setting of the home work for the next day. The general pronunciation was good. It was evident that many of the pupils came from educated homes, where they had often occasion to hear French spoken—this was rarely the case in the other schools, which draw the majority of their pupils from the less educated classes. The boys were able to understand all that was said to them in the course of the lesson, and to answer very intelligibly. A considerable portion of the school hour was devoted to the study of the grammar depending on a passage prepared beforehand. (The boys had a very thorough knowledge of French grammar generally, and might even have obtained distinction in an examination conducted on the principles which determine the manner of examining in modern languages in England.) The master afterwards read out the German of this passage and the boys individually repeated the French. Questions were asked and intelligently answered, regarding the historical and literary allusions. A Fable of La Fontaine was recited, and one boy stood up before the class and repeated a story. The lesson ended by the master's telling the class a new anecdote; he spoke fairly rapidly, and was thoroughly understood by the majority of the class. The general impression left by this lesson, with its insistance on grammar, was that the pupils were being carefully prepared for the study of Latin in the ensuing year. But still I cannot lay too much stress on the fact that the boys were able to speak and to understand French.

*English Lesson in Untertertia of the Oberrealschule in Hanau.**

About twenty-five boys were present. Here was found the other extreme in the method employed. "The child first sees an object, then he learns its name"; this Dr. Schmidt, the director, asserted was the principle on which he based his method. He believed in teaching grammar only so far as it was indispensable, not as a means of mental training. The boys in this class had only been learning English since Easter. The results were astonishing from an English schoolmaster's point of view; but as later on full details will be given of a lesson in the corresponding class in another school, only certain peculiarities of the method will be noted here. The whole lesson was conducted in English. The principles of "visualization" were carried out thoroughly and with extreme conscientiousness. For instance, how to tell the time was taught by means of a clock-face; a match-box was produced and the boys named all the various actions connected with striking a match as the master performed them. (In the lowest classes the French lessons were almost entirely carried on by reference to Hölzel's wall-pictures—the series representing the four seasons—specially designed, under the direction of a committee of language teachers, for this purpose.)† New expressions were written on the board and the spelling carefully and

* This school was working in accordance with the ordinary Prussian curricula.

† Hölzel's Wandbilder für den Anschauungs- und Sprachunterricht (Holzel, Vienna).

systematically studied. Phonetic symbols were not used in this class though Dr. Schmidt allowed his assistants to employ them if they wished to do so, but personally he held that "a picture of the sound" was misleading. One would certainly have expected to find so enthusiastic an advocate of visualization in language teaching an ardent supporter of the phonetic method of teaching pronunciation. His argument that the use of phonetics emphasized the faults of a master whose pronunciation was defective, to the detriment of that of the pupil, is in itself an admission that, by means of such symbols, pronunciation is impressed in a special way on the boys; so that, in the case of a teacher whose English was as excellent as his, phonetics might be employed with great advantage. In this part of Germany the difference between "voiced" and "unvoiced" sounds is very slightly marked in the dialect, and I should have thought that the best way of correcting this fault in a pupil who was learning a foreign language was by means of phonetics. At any rate, the pronunciation of the boys in the classes I visited in this school lacked that certainty which characterised it in those where phonetics were used.

Speaking of this method generally, it was plain how much its success depended on the individuality of the teacher. Though the three masters I saw at work were producing results far beyond anything I have seen in England, among boys of a similar age, yet the difference in their individual teaching powers and qualifications was apparent, in an exceptional degree, in the work of their pupils. In fact it is a method which could only be completely successful in the hands of an extraordinarily gifted teacher.

While discussing this "natural" method, it may be stated that the Gouin method did not find favour with any of the masters I met, though some of them did not despise its aid, and they all admitted that Gouin and his disciples had enunciated several important principles.

French Lesson in Sexta of the Realschule in Bockenheim.*

Herr F. Dörr, Director of the Bockenheimer Realschule, needs no introduction to English students of German methods. This lesson, given under his direction in the lowest form of his school, is particularly interesting as affording an example of the manner in which beginners of nine or ten are taught to understand and talk French. There were upwards of forty boys in the class. They had begun French at Easter, six hours a week being devoted to this subject. For the first three months the teaching had been entirely oral, with the aid of the phonetic representation of the sounds according to Vietor's† system, one especially adapted

* This school was working in accordance with the ordinary Prussian curricula.

† Every modern language teacher is familiar with Professor Vietor's name; but it is, perhaps, not generally known that his celebrated pamphlet, "Quousque Tandem: Der Sprachunterricht muss umkehren!" (Heilbronn 1882), which may be said to have initiated the reform of modern language teaching in Germany, was written while he was Professor of Teutonic Languages at the Liverpool University College.

o the requirements of German pupils. French was spoken distinctly, slowly, and simply throughout the whole lesson. Every command given to the boys collectively was repeated by them in chorus in the first person plural; in the case of a command given to individual boys, the following plan was adopted:

Master: *Venez ici.*

Boy: *Je viens.*

Class: *Tu viens* (pointing at boy); *il vient.*

The lesson opened with the singing of a French song, popular among children in France. After each verse the master corrected the various faults of pronunciation, boys being called up to point out the correct sounds on the phonetic table. Two boys were then sent to the blackboards, each to write a verse of the song, the lesson being continued in the meantime. After another song these verses on the board were corrected by the class; as they were only just beginning to learn to write French mistakes were not wanting. There was continual reference to the pictures on the walls and various objects in the room. A boy stood before the class and named the parts of his body. This is not, of course, a full account of the work done in the lesson, but sufficiently explains the method pursued. The two points which particularly struck one were, that the boys understood what was being said to them in French, and that, though numbering more than forty, all showed exceptional attention and eagerness. Want of space prevents my describing all the excellent lessons I saw in this school. One more example must suffice:—

French Lesson in Prima of the Realschule in Bockenheim.

This is the highest form in the school, so that one was able to witness the final results of the method. The masters in this school complained, and evidently with reason, of the inferior intellectual abilities of their pupils, compared with boys in the same rank of life living in such an environment as that offered by a busy and advanced town like Frankfurt. The boys in this form, however, if they visited France, would be able to understand what was said to them, to express themselves fluently in intelligible, if not always elegant, French on ordinary topics, and to take an intelligent interest in the life and ways of the country. There was an accuracy about their pronunciation showing that it was ready to receive that final polish only to be obtained by residence in France. The same remark applies to their knowledge of the idiom. Particular attention was paid in this lesson to grammar and composition, the book they were reading being made the centre of the teaching. In translating from French into the mother tongue great stress was laid on the idiom of the latter

From the lessons witnessed in the Musterschule (Realgymnasium) I have selected two, given by the director, Herr Walter, himself, which are thoroughly typical of his method. No apology need be offered for describing these lessons in somewhat greater detail:

English Lesson in Untersecunda of the Musterschule in Frankfurt.

There were about twenty-five boys present. They had begun English last Easter in accordance with the new scheme, which up to the present has only reached this form having been introduced year by year in successive classes, starting naturally from the bottom. In calculating the exact time these boys had been learning English allowance must be made for the intervening summer holidays. The first object in the modern language teaching in this school is as far as possible to give the pupil the impression that during the lesson he is in England or France, as the case may be. For instance, on the walls of the room in which this lesson was held were photographs of places of importance and interest in England, coloured cartoons representing the chief events of English history,* a map of the British Isles, and a large plan of London.

It will be seen from the account of the following lessons how important a part the equipment of the classroom plays in the successful carrying out of the method. To mention only one detail, the desks were so arranged and of such a design that a boy could immediately be sent to any part of the room without disturbing his neighbour or interrupting the lesson. In short, the whole machinery moved with the minimum of friction. When one considers the amount of work done in the space of fifty minutes in this school, it is obvious that the least hitch in the proceedings would represent an enormous loss in the total output.

The whole lesson was carried on in English. Once or twice, however, the teacher, to save time, explained in German a command which a boy could not understand. On entering the room the master asked for the Jubilee numbers of *The Graphic* and *Illustrated London News* from the two boys whose turn it had been to take them home the day before. This led to a conversation about the Queen and English notabilities, English schools and school life. The master described a game of cricket, and, to explain the word "toss," called up a boy to "toss" with him for innings. All mistakes in pronunciation were immediately corrected, the boys indicating the right sounds on the table of phonetic symbols (Vietor's system) hanging on the wall facing the class. Two boys then went to different boards to write in their own words an account of certain parts of the foregoing conversation. The lesson meanwhile proceeded, a boy being sent to the plan of London to point out and describe various places of interest, such as Hyde Park, St. Paul's, Trafalgar Square, &c. It struck me that many boys in provincial English schools would not have known as much about their own capital as these young Germans. Trafalgar Square suggested a passage in their Readers on Nelson and the Battle of Trafalgar, and various boys gave an account of this event. The class then corrected what the two above-mentioned boys had written on the boards; verbs occurring

* Published by Cassell & Co., of London.

were conjugated in their sentences by the class in chorus; also thus: *I go, you went, he will go, we should go*, &c.* The boys then recited various poems, representative of English life and character. Questions were asked as to the authors. Verses were written on the boards in the manner already described in the account of the lesson in the Bockenheimer Realschule. The class corrected these. The *k* having been omitted in the word *knee*, the master asked for another example of a word beginning with *kn*; the boys were immediately ready with *knavish*, and quoted "Frustrate their knavish tricks!" This suggested the recitation of our English National Anthem.

Finally, the master recited and explained to the class a new verse of poetry. Every expression presenting difficulty to the pupils was explained by reference to some former occasion on which they had met with it, or translated by English words already familiar to the boys. One of the class was then sent with a pointer to the phonetic table where, as the master again recited the verse slowly, he pointed to the symbols representing the different sounds, and another boy wrote them on the blackboard. While this was going on, the class could be seen silently shaping their mouths to each sound. The verse written, the boys read it aloud from this phonetic transcription. It is particularly worthy of remark that the pupil did not study the new verse in its ordinary spelling in his Reader before it had been prepared in this manner. Owing to this method of teaching sounds, it was possible to detect immediately those principles of English pronunciation which the beginners had not yet mastered. The chief mistakes made were in those sounds which present particular difficulty to Germans, such as the *o* in *not* and the *a* in *all*.†

French Lesson in Untertertia of the Musterschule in Frankfurt.

After the somewhat lengthy description of the last lesson, it will only be necessary to reproduce the notes taken during this one. The class consisted of about forty boys, in the middle of their fourth year of French, who had begun Latin this year. The whole lesson was given in French. The master began by reading a letter which one of the boys had received from a friend in France. (Exchange of letters arranged by Dr. Hartmann, of Leipzig, alternately in mother tongue and foreign language.) The boys repeated what they had understood of this letter. Explanation, by reference to map, of geographical allusions. Grammatical study of selected sentences. Conjugation of verbs in their sentences, *e.g.*:—

Si *j'*avais bien fait *mes* devoirs *mon* maître ne *m'*aurait pas puni.

Si *tu* avais bien fait *tes* devoirs, etc.

The word *impatience* presented difficulty. One boy reminded the master that they had met with it in a story. This boy related the story. (I was informed they had not heard it for two years.) Talk about picture of Paris (Hölzel's series),

* Or thus:—I go—did you go? he has not gone; hadn't she gone? we shall go; will you have gone? they wouldn't go; wouldn't they have gone?

† I visited this class again in the following January. The boys had made extraordinary progress. I spoke to them for half-an-hour in English on their lesson, and found little difficulty in making myself understood and in obtaining *intelligent replies*.

sentences repeated so as to conjugate verbs in all parts. A Parisian boy, who happened to be in the class, questioned the others on this picture. Two boys acted scene representing buying and selling in a shop. Conversation on La Fontaine's fables—recitation of several. Correction of letter a boy had meanwhile been writing on the board, and afterwards of account, written by another boy at the same time, of passage studied the day before in reading book. (This book was one used in the same edition by boys of a corresponding age in French schools*.) The boys questioned one another on what had been written. French song. Two boys sent to board to write present infinitives of any sixteen irregular verbs—these conjugated in principal tenses by class singly and in chorus. Phonetics used as in English lesson.

It is difficult to criticise Director Walter's methods.† Like all the new methods, it demands, for its complete success, great ability, indomitable energy, and enthusiastic devotion on the part of the teacher. Where, as in most of our English schools, a master is expected to give about thirty lessons a week, it is doubtful if any physique could stand the strain incurred. But then the Germans recognise that a few hours of the best teaching are worth more than many of inferior, and that overwork is inclined to crush enthusiasm. One of the most striking points in Herr Walter's lessons is the way in which he makes use of all that is best in other methods. For instance, having occasion to send a boy with a message to another class, he made him state in French, according to the Gouin method, all the actions he would perform in carrying out this order. There were many circumstances connected with his school and its curriculum, which prevented him from employing phonetics to as great an extent as he would wish, but he believed that before long he would be able to do so. He expressed it as his opinion that, in the case of young beginners learning a foreign language phonetic transcriptions only, to the exclusion of the ordinary spelling, should be used during the first six months, and if possible during the whole of the first year. He, together with several other masters I met, is strongly opposed to translation from the mother-tongue into the foreign language. His first object is to teach the boys to express themselves in the idiom of the foreign language, and hence to discourage any teaching which will train them in the habit of mental translation. He is of opinion therefore that all the translations still officially demanded should be replaced by original composition. Certainly there could be no more severe test of the pupils' knowledge in a written examination than that of writing original compositions and of translating "unseen" passages from the foreign tongue; for Director Walter also insists that all such passages set should be "unseen."

Written examinations, at the end of each term, as we understand them, are unknown in Germany. In some schools they are held at the end of each year, in others the headmaster makes a point of being present at as many of the lessons of his assistants

* H. Bruno: "Le Tour de la France."

† *See* Walter, "Der französische Klassenunterricht" (Elwert, Marburg, 1888.)

as possible, and of personally inspecting their work. It is needless to dwell on the many advantages of the latter system. The two formal examinations are (1) that held at the end of the school course, and (2) the so-called Abschlussprüfung, the passing of which excuses a boy from one of the two years of military service.

Director Dörr gave it as his opinion that a boy would lose nothing by not beginning modern languages before the age of 12. Director Walter stated that he would like to see the Frankfurter Lehrpläne so modified that the teaching of French in the Realgymnasium was postponed until Class V., and the hours thus gained in Class VI. given to the study of the mother tongue. I was present at a lesson in "commercial" French at the Wöhlerschule. This is the only school in Frankfurt in which this branch of French is taught, the general opinion being that it was not a fit subject for schools. I was informed that the municipality was about to establish an institution, where boys could learn foreign commercial correspondence, together with other commercial subjects, after having completed their school career.

The masters, employing the methods described above, are greatly helped by admirable class-books; without these their work would be enormously increased. The want of similar books in England, at any rate as far as French is concerned, adds to the difficulty of those modern language teachers who are anxious to introduce methods akin to these. But it is impossible to equal the results recorded here with the few hours allotted to modern languages in English secondary schools. The knowledge of this fact may be one of the reasons why the English teacher of these subjects rarely attempts to equip himself for his work as thoroughly as his German colleague. Many authorities claim that it has been proved in the Frankfurt Gymnasium and Realgymnasium that a greater number of hours can be devoted to French in the junior forms without detriment to the study of Latin. If a similar reform were to be carried out in English schools, it would have to be introduced in the lowest of these junior forms. It would, of course, take several years to work through a school up to the highest classes. Various opinions may be held as to the methods and curricula I have described in this paper; the fact remains, however, that Germany has a very long start of us in the teaching of modern languages. About this there can be no two opinions, but whether we can, within the next decade, make up the ground we have lost may be open to serious doubt.

FABIAN WARE.

December, 1897.

THE TEACHING OF MODERN LANGUAGES IN GERMANY.*

Not the least interesting and instructive experience of an English teacher travelling in Germany is the insight gained into the opinions of German educational men on English education. Very rarely does one come across anything like an offensive statement of our general inefficiency. As a rule, the remarks made are wise and temperate; the Germans are perhaps less severe in their strictures on our education than the more impartial of our own educationalists. In their modern language teaching, however, they are far ahead of us, and they cannot but be aware of the fact. It would be well worth while to look into the matter a little closely, and not only study their methods, but also hear what they have to say.

German teachers visiting England are not a little surprised and disappointed at the frequent difficulty they meet with in gaining admission to the secondary schools, especially the large public schools. The Head Masters willingly show them over the grounds and the buildings, and let them look into the gymnasiums, but seem very shy of letting them see their teachers at work. Among the Germans, school-visiting ("hospitieren," as they call it) is a recognized and indispensable part of every teacher's training. They themselves show great courtesy and kindness to strangers visiting their schools, with a view to understanding their system, and they are very ready to recognize merit where they find it. They make good use of what they see, moreover: they have recently introduced English games into German school life, and frankly admit the good it is doing their youth of both sexes. But the heartiest praise I heard them bestow was on the importance attached to the development of character at English schools. They are waking up to the fact that their school training has hitherto appealed too much to the intellect alone. They certainly avoid this defect in their way of teaching French and English. They keep steadily before their minds that a foreign language is not so much an end in itself as a key to the life and character of a nation; hence their teaching is practical to an almost incredible degree, and enlivened by

* The remarks in the following article are based on observations made during a period of six months, which I spent in Germany this year as Travelling Scholar of the Gilchrist Trust. The educational centres visited were Berlin, Halle, Marburg and Frankfurt a/M in Prussia; Leipzig in Saxony; Jena and Eisenach in Thuringia; Darmstadt and Giessen in the Grand Duchy of Hesse; Heidelberg, Karlsruhe and Freiburg in the Grand Duchy of Baden; and the Free Towns of Hamburg and Bremen. I wish here gratefully to acknowledge the numerous facilities which the respective German governments granted to me, at the request of the Foreign Office, transmitted through H.M. Ambassador at Berlin. Not only was I allowed full liberty to visit girls' schools in Prussia, and boys' and girls' schools everywhere else, but, in the case of Saxony, Baden and Hamburg, I was especially recommended to the heads of schools, and was invariably treated with the greatest courtesy.

innumerable side-lights cast on the people themselves, their history and literature, manners and customs. No pains are spared to bring these vividly before the minds of the pupils. In one girls' school, for instance, which had a training college attached, the English teacher got the students to draw English fire-places and English houses, besides using many English scenes of town and country to illustrate his lessons. I have heard some teachers say that this sort of thing is overdone, yet wherever I came across it, I always found that it made teacher and pupils take far greater interest in their work.

Modern language teachers in Germany are under the impression, not wholly erroneous, that our acquaintance with the "New Method" is chiefly confined to the "Gouin System." The latter has indeed much in common with their own reformed methods, and they acknowledge the soundness of the principles on which it is based, while criticizing certain of its features. Such reforms as we have introduced we carry out in a fragmentary, desultory manner, almost without system. One of the best of our reformers, W. H. Widgery,* who is very highly esteemed in Germany, died before he had time to make his work tell on the nation at large.

Perhaps the sharpest criticism which the Germans pass on our modern language teaching is a tacit one, viz., their consciousness that they have a great advantage over us in the commercial world through the practical knowledge their youth possess of French and English. This available knowledge is largely acquired at school. Some English pedagogues are under the delusion that the Germans, even in their teaching, are a nation of scholars merely. Nothing struck me more, in the many modern language lessons I heard, than the intensely practical nature of the instruction given—the consistent, successful efforts to make the teaching bear directly on the life of the pupils.

Everywhere they talk of the "New Method," but this new method appears under various modifications. In some parts of the country teachers have avowedly adopted what they call "moderate reform," meaning by this that they do not entirely discard translation into the foreign tongue, nor the systematic teaching of grammar rules. Sometimes one feature of the new method stands out more prominently, sometimes another. Frequently the extensive use of pictures, with conversation upon them, comes to the front; occasionally conversational preparation for the coming reading lesson. Again, phonetic drill is considered by many a *sine quâ non*; while others would have it left out altogether, and yet look on themselves as belonging to the "Reform." All, however, are agreed that the reading-book as such, and not merely as a translation-book, should form the centre of instruction, affording material both for conversation and for grammar, whether in connection with the pictures or not.

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* See the "Journal of Education" for 1888 for a series of articles by Widgery on the Teaching of Modern Languages; they have since been published in pamphlet form.

Allowing for such variations in the prominence given to different aspects of the new teaching, its principal features may be summed up as follows:—

1. Purely oral teaching at the beginning.
2. The use of the foreign tongue, as much as possible, from the first and throughout.
3. The absolute or partial exclusion of translation from the native into the foreign tongue, except in the higher classes.
4. The reduction to a minimum of translation from the foreign tongue into the mother tongue.
5. The extensive use of pictures in the younger classes, and generally as concrete a way of putting things as possible.
6. The extensive teaching of *Realien*, *i.e.*, the life, customs and institutions, geography, history and literature of the foreign nation.
7. Constant conversations on the reading-book, either in the form of preparation, or, more frequently, by way of revisal.
8. The use of the reading-book as material for learning grammar inductively.

These are, in the main, the leading principles. There is still considerable difference of opinion as to the exact extent to which translation from the foreign tongue is to be discouraged. Some, again, are in favour of maintaining, to a limited extent, translation into the foreign tongue, while others would drop it entirely; but all, without exception, wish composition exercises to take the form mainly of what are called "freie arbeiten"—the putting and answering of questions, reproduction of passages read, description of pictures, writing out a story learnt, with change of person or tense, writing of letters or short essays, &c. There is some disagreement, too, as to the desirability of using pictures so extensively as at present. In some schools they are used but little, merely to supplement the reading-book, while in many they are not confined to the younger classes, but are employed also in the highest forms.

The chief point in dispute, however, is the question of phonetics. It is an exceedingly important question, and the war is still waging hotly round it. Yet the principles of phonetic training are steadily gaining ground, although in some parts of Germany its opponents assert the contrary, a mistake which recently crept into some English educational publications. All male teachers are agreed that a thorough and scientific training is indispensable to the modern language teacher himself. The question at issue is whether the pupils should or should not be subjected to a certain amount of phonetic drill. In several schools, I saw such phonetic drill applied with marked success.

Even apart from phonetics, the whole movement has caused far greater attention to be paid to pronunciation than hitherto.

As a rule, the German teacher of modern languages spares no pains to acquire a thorough literary and colloquial grasp of the languages he means to teach. In German schools the modern language teachers are always Germans, and the same teacher is almost always required to take both French and English, although many are now in favour of having a specialist teacher for each language. A stay of a year or two in one or both foreign countries during the time of preparation is not considered enough. The *Neuphilologe* avails himself of every subsequent opportunity to keep up the knowledge he has gained. He frequently spends his summer vacation in France or in England; if that be out of the question, Switzerland or some holiday course affords the valued means of practice in foreign languages. This willingness to take trouble, this high standard of attainment, is certainly one of the secrets of the universally-acknowledged success of the Germans as language teachers. Each student, at the close of his university course, has to pass the *Staatsexamen*: by all accounts, the men who come successfully out of this are not likely to be found deficient on the side of knowledge. Many seek an opportunity of going abroad before taking the *Staatsexamen*. Then comes the *Seminarjahr*, during which the student learns how to teach. Certain of the higher schools have a *Seminar* attached to them—*i.e.*, they take in a limited number of students who have passed the *Staatsexamen* and wish to enter the teaching profession. The Head Master of the School gives them lectures in pedagogy, discusses educational questions with them, sets them to write papers on educational subjects, and guides them in their reading. At first the *Seminarist* only looks on at lessons given by members of the staff, receiving special instruction as to methods of teaching. Later on he will himself teach a class under the superintendence of the usual master. Then come the regular criticism lessons given in presence of the Head Master, the specialist teacher, the class teacher, other members of the staff, and all the *Seminaristen*. Each lesson is subsequently discussed in full conclave.

It will be at once realized that, under a wise Head Master, this sort of training is invaluable. As far as I could judge, there seemed little fear of this system being exposed to the great drawback of the average training college, viz., mechanical methods. Great trouble is taken with these young men, and the teachers never forget that the students in training are well-read University graduates, inferior to themselves only in practice and experience. Herr Nodnagel, the Head Master of a *Gymnasium* in Darmstadt, himself an exceptionally able and interesting teacher, was kind enough to give me some details of the working of the *Seminar* under his charge. Two afternoons are set apart for the instruction of the *Seminaristen* in pedagogy, general methods, and, as far as time permits, special methods also. German and geography are never omitted. He gets different students to read up and discuss different educational questions, so that the *Seminar*, as a whole, may become acquainted with a greater variety of pedagogical works than would be possible if all read the same.

Each student has to write one elaborate educational thesis. Sometimes very useful work is done in this way, work of abiding educational value. I had not the pleasure of being present at any regular *Probelektion* (criticism lesson), but I had the satisfaction of seeing how the *Seminaristen* benefit by the teaching of the *Fachlehrer* (specialist teachers). I saw Professor Lenz give several French lessons at the above-mentioned *Gymnasium*, in presence of four *Seminaristen*. As we entered the class room, Professor Lenz handed each of us a scheme of the lesson. At the close he called us round him, explained the particular aim of the lesson, and pointed out his reasons for this or that procedure.

It will make the matter clearer if I describe in detail one of these lessons. The class was *Untertertia*. There were twenty-one boys present. It was their second year of French. They had had five hours a week during their first year, and were now having three. The text-book used was Dr. Gustav Ploetz's *Elementarbuch der französischen Sprache. Ausgabe B.* (Berlin, Herrig, 1895.)

The scheme of the lesson was as follows:—

UNTERTERTIA, 17th September 1897. 8^{30}-9^{10}.

I. *Durchnahme der Klassenarbeit.* 8^{25}-8^{40}.

II. *Durchnahme der Aufgabe* 46. 8^{40}-8^{55}.

(1) *Conversation.*

(2) *Teilweise Zurückübersetzung mit Variationen und Regel.*

III. *Durchnahme von* 47 (*Wiederholung*).

(1) *Übersetzung.*

(2) *Lesen.*

(3) *Regel.*

Aufgabe: Wörter bezw. Ausdrücke & Regel von 47.

The first part of the lesson consisted of the translation, in rapid succession, of a number of verbs and phrases taken mostly from the *Klassenarbeit*. Much skill was shown by the teacher, not only in the general questioning, but also in getting the boys to correct themselves. The *Klassenarbeit* was then rapidly translated by the class orally, in short phrases. Next came questions on Lesson 46, viz., *Paris et les Parisiens*, followed by reproduction of sentences with variations.

Several grammatical questions were introduced, and the mention of *les bourgeois de Paris et de Londres* suggested *les bourgeois de Darmstadt et de Francfort*, and in other ways the pupils' own neighbourhood was brought in. Lesson 47 was thereupon *first* translated, *then* read. In the course of the reading, the pupils were told how to place their organs of speech in order to produce the sounds properly. The strictly grammatical part of the lesson consisted mainly in a discussion of the relative pronouns, more especially *dont*.

This lesson exactly coincided with the scheme. The boys did remarkably well, and the French language was used throughout

the lesson. In his talk with the *Seminaristen* and myself, when the lesson was over, Professor Lenz laid stress on the importance of taking the translation before the reading. He commented on the exact coincidence of the lesson with the scheme he had drawn up, but said that he would not have hesitated to depart from it, had the state of the pupils' knowledge seemed to require that, *e.g.*, if their exercise had been badly done. Sometimes he spends over half an hour discussing the exercises. He makes a point of interrupting the boys as little as possible when they are reading.

It will be seen that the above lesson only partially followed the new method, being given at a *Gymnasium*, one of the more conservative class of schools. The inductive treatment of grammar, the conversation on the passage, and generally the spirit of the lesson were, however, entirely in harmony with the new order of things. Professor Lenz has had many years' experience, and revealed a practical skill in dealing with his class, superior to that of many of the reformers more strictly so-called. I have chosen this lesson to illustrate the kind of training that young teachers get during their *Seminarjahr*. Generally the year of military service falls about this time, but, besides that, they have yet another year's probation before they can enter upon regular duties as a teacher. They must spend a *Probejahr* at some secondary school, still under superintendence. The chief condition laid down is that they should teach eight hours a week, for which they are not entitled to remuneration. On the other hand, many Head Masters do give them paid work to do. It is usually of this time that many modern language teachers avail themselves to go abroad. As has been already suggested by Dr. J. J. Findlay, a national interchange of young teachers might well be set on foot, to the mutual benefit of the modern language teaching in the schools concerned. There is a strong movement on foot at present to facilitate visits to France and England at this stage. Many would have part or the whole of the *Probejahr* spent in schools abroad, and have the expenses defrayed, in whole or in part, by Travelling Scholarships, in case of need. Similarly, leave of absence and scholarships are to be granted from time to time to modern language teachers, to enable them to go abroad again to revive their knowledge, to keep in touch with the life of the foreign nation, and to keep abreast of its movement and development. Many resolutions have been passed on these and kindred subjects, in the course of the last few years, at meetings of modern language professors and teachers, some of them among the most prominent educational men of the day. (cf. *Die neueren Sprachen* IV. *Band, Hefte* 2, 3, 4, May, June, July, 1896.) Let me here briefly recapitulate the preparation of a modern language teacher for his work, in Germany: three years at a Vorschule or Volksschule, nine years at a Gymnasium, Realgymnasium or Oberrealschule, three or four years at a University, generally at two or three different Universities, one or more years' residence abroad, which may or may not form part of the regular course of study, a *Seminarjahr*, a *Probejahr*, and, if that can be considered part of the equipment of a teacher, a year's military

service. Then, and not till then, is he in a position to take a responsible post as teacher. It is hardly necessary to point the moral by glancing for a moment at our English University men, who enter on their duties as trainers of youth without direct preparation of any kind, and whose strongest recommendation is often a brilliant record at boating or football!

At present, in most German schools, French precedes English, and has more time devoted to it. But many schoolmasters think that English ought to come first, chiefly because it is easier for German children to learn English than French, but also because of England's political and commercial importance, and for the sake of our English literature.

There is a group of German educationalists who are strongly in favour of spending more time on German language and literature. A necessary corollary to this would seem to be a diminution in the time spent on modern languages—not that the pupils should give less time to French and English, while they are learning them, but that they should begin later, say at twelve years of age, when they have obtained a fairly firm grasp of their own language. In the *Oberrealschulen* and in the *höhere Mädchenschulen*, four hours a week are spent on German, French, and English respectively—*i.e.*, twice as much time on foreign languages as on German. It might be replied that all other lessons are, or may be, training in German, but the reformers do not seem to take this view. The Head Master of a girls' school told me that they cannot write good, correct essays in German in the highest class—spelling, punctuation, and construction being all defective. Remembering the deficiency in those respects of our average High School girl of fifteen or sixteen—the age at which German girls leave school—I could not help thinking that his arguments would apply *a fortiori* to English schools. These reformers maintain that the foreign language would not suffer through being taken up later, when the pupils know their own language better; it would be a saving of time on the whole, while devoting most attention to the most important subject. There is possibly a political reason for this view. Comparing themselves with the English, whose language is spoken all over the world, and who are therefore spared to a certain extent the necessity of mastering foreign languages, the Germans seem to fear that their own adaptability and linguistic facility have to some extent deprived their language of a perfection of which it is capable and a prestige which is its due. That is not quite their way of putting it; they simply say, "If we were not so ready to cultivate and speak the language of others, they would be more ready to speak and cultivate ours."

In the *Realgymnasien* an almost opposite tendency is setting in—French and Latin are rapidly changing places. Latin used to be begun in the lowest class of the school at nine years of age, and French two years later: this is still the case in the majority of those schools, but an increasing number begin with French, and postpone the teaching of Latin. How far this may be

the beginning of a movement to abolish the *Realgymnasien* altogether I am not in a position to judge; the matter has already been discussed in these *Special Reports*. Teachers, for the most part, seem to be in sympathy with this interchange of Latin and French in the curriculum, and it is certainly spreading.

In the recently instituted *Mädchengymnasien* not much time can be devoted to French and English, as the pupils have only three years to learn enough Greek and Latin to enable them to compete with young men who have studied these languages from early boyhood. The newer methods have not been introduced into the *Mädchengymnasien* to any great extent. The time devoted to English is even less than at the boys' *Gymnasien*, viz. one hour a week. No good work can be done under these circumstances. Accordingly, these schools, interesting as they are from many points of view, could offer but little to the student of methods of teaching modern languages.

Girls generally remain at the ordinary *höhere Mädchenschulen* from the age of six to the age of sixteen. Indeed the recent Prussian regulations (1894) have fixed the leaving age at fifteen! But there is a sort of outsiders' class called *Selekta*, where girls who have finished the regular course can carry on their studies in some subjects. Sometimes a good deal of time is devoted to modern languages in these classes, but, on the whole, the work done is less satisfactory than in the ordinary school course. So far as it goes, the language teaching in the average *höhere Mädchenschule* is admirable, and this is no less true of the higher class of private schools than of the royal and municipal schools. I should almost venture to say that the private girls' schools of Bremen and Hamburg carry off the palm for modern languages. The following lesson is typical of the kind of teaching which I repeatedly had the pleasure of hearing in these towns. It was given at Fräulein Bendel's school in Bremen, by Fräulein Mertens, to pupils about eleven years of age, who had been studying French for two years and a half. Their text-book was Ducotterd and Mardner's *Lehrgang der französischen Sprache*, Part I., Div. II. (Frankfurt a/M. Jügel, 1891), and the picture of the town was before the class. While asking questions on the picture, the teacher constantly digressed in the happiest way, giving rise to the liveliest dialogue between herself and the children, on matters suggested by the picture, but belonging to their daily experience.

At the outset, the drawing down of the window-blind, "*parce qu'il fait du soleil*," led to a little talk about the weather and walks. Then the answer to the inevitable question "*Qu'est-ce que ce tableau représente?*" led to the naming of other large towns. The mention of St. Petersburg suggested questions on that town, on the Emperor of Russia, followed by reference to the German Emperor and Imperial family. London also came under discussion, and the difference between an island and a continent led back to the continent of Europe, the town of Bremen, the school, and the pupils' lessons. After digressions of this kind, the teacher always returned again to the picture, and

taught new sentences, besides revising the old. Whenever a new word came up, she suggested or showed the actual thing: she pronounced the word very distinctly, made the children repeat it after her, and give the German equivalent. She then wrote it on the blackboard, the children spelling it; and finally, she impressed it on their memories by asking questions, introducing the word just learnt; *e.g.*, having illustrated "*le pont*," by letting the gap between two desks represent a river, and some exercise-books do duty for a bridge, she afterwards asked the girls, "*Combien de ponts y a-t-il à Bremen?*" &c. Similarly, a monument in the picture led to the description of monuments in Bremen. "*Les revendeuses*" in the market-place introduced questions on fruit, poultry, vegetables, &c. Immediately after the teacher had taught the word *cygne*, a pretty little interruption occurred. With great compassion and evident expectation of sympathy, a child eagerly said, "*Il y a deux cygnes sur la contrescarpe qui ont mangé un petit canard.*" The teacher had just been dwelling on the beauty of the creatures, but she promptly responded, "*Oui, les cygnes sont très méchants, il faut avoir bien garde qu'ils ne vous mordent.*" Difficult idiomatic terms were introduced—*e.g.*, "*Les messieurs (sur le pont) se promènent bras-dessus, bras-dessous.*" The *réverbère* led on to discussion of the different means of lighting in the school, electricity in the gymnasium, gas in the class room, and so on to the gas works in Bremen.

"*La boulangerie*" was responsible for a description of the process of baking, reference to *le boulanger, la farine, le moulin le blé, le laboureur, le pain*, and the lesson was closed, without incongruity, by a child's repeating "*Donne-nous aujourd'hui notre pain quotidien*," in a natural, reverent way. The whole lesson was given, like so many I heard, without a moment's pause, yet without the least hurry: the teacher showed throughout the most perfect mastery of the language, of her subject, and of the children. As for the latter, their faces were beaming the whole time, and their occasional "Oh! oh!" when they by mistake, or Fräulein Mertens, on purpose, said anything absurd in French, showed how well they understood, and how free they felt with her, yet throughout they were as good as they were happy.

Not less excellent in its way is the teaching at the women's training colleges. Five admirable institutions of the kind have left a most pleasing impression on my mind, and doubtless there are many others as excellent. The Darmstadt *Seminar*, referred to above, was especially interesting on account of the way in which the English teacher, Professor Heim, not only kept his students interested by a constant, skilful use of *Realien*, but also treated them as future teachers, even in their ordinary English lessons, giving them examples of the way to teach, *e.g.*, a reading lesson with illustration and running commentary. Dr. Kippenberg's *Seminar* at Bremen was an instructive revelation to me of the means whereby girls may be brought to express themselves freely in English without any other assistance than that of an

able, scholarly teacher, who always lectures to them in English, and insists on their subsequently reproducing in English the substance of what he has said. It is true they also write long accounts of English books they have read, and deliver these in the form of lectures to their fellow-students. At the *Prinzessin Wilhelm-Stift*, in Karlsruhe, I heard Fräulein Bühler, who had studied the Gouin system in England, give "series" lessons to her students. At a grammar lesson which I also heard there, I was struck with the ease and readiness with which the students illustrated the rules in question by quotations or adaptations from "Mary Barton," the novel they had recently been reading. From Fräulein Willigmann, of Fräulein Lucie Crain's *Lehrerinnenseminar* at Berlin, and from Fräulein Herrmann, of the Royal *Augustaschule* and *Seminar*, I gained most valuable insight into the working of those teachers' colleges.

The classes at the *Augustaschule*, in which the "*Seminaristinnen*" of the third year teach under supervision, are divided into two sections, each section being handed over to a different student. Classes VI. and V. were having French lessons from the students during my visit. The same student gives a class-section four lessons in succession in the same subject. The first morning I spent at the *Augustaschule*, I saw two students give French conversation lessons to children who had been at French a year, having five French lessons a week. Fräulein Herrmann interrupted the course of the first lesson a little more than she usually does, because neither the children nor their teacher had had a regular French conversation lesson before. The chief reasons for which the lesson was interrupted were (1) to get the student to repeat, before making the children repeat, after a mistake had been made; (2) to give the children more practice in pronunciation, showing them how to place their speech-organs. The student once made the mistake of getting the children to spell the word before they had seen it written. Fräulein Herrmann told me she thought it a waste of time to let the pupils spell at all during the lesson; once, at the end, when they were to write the *Vokabeln* into their note-books, was quite enough. The children were required to repeat the teacher's questions, before they were taught to answer them. A good deal of time was spent over one sentence, the class being made to pronounce word for word, syllable for syllable. When Fräulein Herrmann took them in hand, she made them practise the sounds over and over again, and had recourse to a little phonetic drill, to get them to produce the voiced consonants properly, sound the *t* without emission of breath after it, &c. She spared no amount of trouble in getting individual children to pronounce correctly, but the class never grew weary or inattentive, and the others did much better after one had been carefully shown how to produce a given sound properly. There is a regular syllabus of work that the students have to keep to, and both sections of a class are supposed to do exactly the same work. The students are criticized privately after the lesson. This teaching under superintendence and their regular criticism lessons prepare the students for the practical part of the *Lehrerinnenprüfung*.

Fräulein Willigmann explained to me how she prepares her students for the theoretical part. She gives them a great deal of writing to do. Once a week they have *Extemporalien* (translation by writing in class of sentences repeated orally by the teacher). All three classes of the *Seminar* have also home-exercises once a week. At the end of every quarter they have a *Klausurarbeit* (examination paper), worked under the same circumstances as at the final examination, and lasting one hour. During the last half-year, besides *Extemporalien* and home-exercises, they have *Klausur* once a week, this taking the form of translation of passages from French and English authors, with the help of a dictionary. A short time before the examination, Fräulein Willigmann gives her students an *oral* revisal of all the exercises they have written. She considers it a waste of time and energy to teach anything without requiring it to be learnt thoroughly. She believes very much in learning poems by heart, and always teaches far more than are required for the examinations. As exercises she gives continuous passages gradually increasing in difficulty. In English she finds herself obliged to give sentences the first year, because, as a rule, the girls coming from the *höhere Mädchenschulen* are not so well grounded in English grammar as in French grammar. I heard her give two or three lessons to the *Seminaristinnen* at various stages, and was struck, not only with her readiness of resource and the accuracy of the students' knowledge, but also particularly with the habit she had of constantly comparing French and English, so that really every French lesson was at the same time a lesson in English, and conversely. She aims at making the students able to translate French into English and English into French without the medium of German.

It will be observed that these lessons also are not wholly carried on according to the new method. In the older classes of the schools, and in the students' classes, the teachers have necessarily to some extent got their hands tied by the examination regulations. For the *Lehrerinnenprüfung*, no less than for the *Maturitätsexamen*, a systematic study of the French and English grammars by Ploetz and Gesenius is very useful, and translation is still an essential part, usually the only written part of every modern language examination, except that a free essay is sometimes substituted, by no means generally as yet. The Germans are happy in an immunity from a multitude of examinations. They pity us very much for still being under their thrall. In most Girls' High Schools, examinations have been utterly abolished. In boys' schools they have rarely more than one, or at most two, that really count, viz., the examination entitling them to only one year's military service instead of two, and the examination that admits to the Universities. Both these are very important. Indeed, the future career of the pupils largely depends on their success at these two examinations respectively, and it is feared that much of the depression on the part of boys unable to pass these is due to the over-anxiety of parents for their sons' future. Still it is a great advantage that the school-work should not be dislocated, as so often in England, by

the preparation for different examinations, nor the teachers habitually exhausted at the end of each term by the overstrain consequent upon "terminals." All German examinations, moreover, are largely oral. The examiners keep the matter in their own hands, and thus it is impossible to get a sight of previous examination papers. Yet I heard no complaints anywhere of injustice or partiality on the part of the examiners. At the boys' schools, if the written work is admirably done, and the pupil's teachers give a good account of him otherwise, he is excused the oral examination. The oral examination in languages consists of the reading and translation of some unseen passage of a foreign author, answering grammar questions in German, and questions on the subject-matter of the passage in the foreign language. Questions on literature, philology, &c. will depend on the examiner and the nature of the examination.

Under the circumstances, it will be seen that the new method can only be fully applied in younger classes. The following two lessons bring in most of the striking characteristics of the new teaching, except the use of pictures. Both lessons were given by Dr. Dorfeld, on successive days, at the Gymnasium in Giessen. The class (IV.) had been at French for six weeks, having five lessons a week. (N.B.—In classes U III. to O I. they have only three lessons a week.) The age of the boys was about eleven. The school has a *Seminar* attached: on both occasions two *Seminaristen* were present. On the first morning the English Professor of the University also came as a visitor, and was filled with admiration at what he saw.

Dr. Dorfeld began by asking "*Dans quelle classe es-tu?*" but before allowing the question to be answered, he had it first repeated, then translated. This order—putting of question, repetition of question, translation of question, giving the answer—was followed throughout, and the lesson went on very briskly. From time to time two boys were told off to write on the blackboard, one the question, the other the answer. Dr. Dorfeld, meanwhile, continued to question the class as above, until the two boys had finished writing; then he said to the class, "*Regardez le tableau. La première partie?*" "*C'est correct.*" "*La seconde partie?*" "*C'est juste.*" Whenever either question or answer was not quite correct, a forest of uplifted hands showed the readiness of the young critics to find fault: they let no dot over an *i*, no punctuation-mark be neglected. Meanwhile, a boy stood at the blackboard with sponge and chalk to make the required emendations. The sentences were then rubbed out, and a fresh couple were sent up to write another question and answer. This went on without intermission, each pair of boys running rapidly and lightly to and from the board.

Here are a few examples of the questions put:—

Comment est la salle d'école?

Combien de murs a la salle d'école?

Qu'est-ce que la porte a?

Montrez le loquet.

Montrez la clef.
Comment sont les fenêtres?
De quoi sont-elles faites?
De quoi les vitres sont-elles faites?
Qu'est-ce qu'il y a dans la salle d'école pour le maître?
Qu'est-ce qu'il y a dans la salle d'école pour les élèves?
Quelles sont les parties d'un banc d'école?
Qu'est-ce qu'il y a dans les tablettes?
Qu'est-ce qu'il y a dans les encriers?

and so on. The book-bags were discussed, where worn, where placed during class, &c. Finally, the naming of the parts of a book led on to the new lesson. Dr. Dorfeld held up before the class a book open at the first page, and said, speaking slowly and emphatically, pointing to what he was speaking about:—"*Sur la première page—se trouve le titre du livre—avec les noms* (Lat. *nomen*)*—de l'auteur—et de l'imprimeur*, letting the boys translate as he went along. He next laid the book down, and made the class repeat together one of the new words, once or twice. Then he called out a boy, who repeated the word, and spelt it phonetically, *i.e.*, by pointing out the sounds on Vietor's *Lauttafel* (phonetic table of vowels and consonants). The words so treated were *première, trouve, titre, nom, l'auteur, l'imprimeur.* After each word had been duly practised and spelt by itself, it was repeated again once or twice, and then put into the context, *e.g., trouve* was repeated (with the *v* sound prolonged), also *titre*, then *se trouve le titre* was repeated by the class after the teacher. So *nom—avec les noms—l'auteur—de l'auteur—l'imprimeur—de l'imprimeur—avec les noms de l'auteur et de l'imprimeur.*

The lesson given to the same class on the following day began with grammar. The pupils were reminded of the different "*Pronomina*" they had learnt, occurring in various sentences. Dr. Dorfeld then gave the German, and the boys the French, of phrases introducing the possessive pronouns (*notre école, votre école; mon livre, ton livre*, &c.). After this short introductory revisal, he let the boys choose some word. *Le loquet* was chosen, and the teacher made sure that they knew what they were speaking about by getting a boy to point to it. He gave the German for *j'ai mon loquet, tu as ton loquet*, &c., different boys translating. Then the class repeated the tense throughout, the teacher marking time, and instantly detecting the slightest mistake.

Another word was taken, again suggested by a pupil—*meine Hefte.* "*Ich habe meine Hefte*" was repeated and translated by the same pupil (*j'ai mes cahiers*). The rest of the tense (*tu as tes cahiers*, &c.), was given by different pupils, without help of the German. Again, "*Habe ich mein Buch?*" was translated, "*Ai-je mon livre?*" and the rest of the tense given in the same way as before. Here two boys were set to write, on the black-board, the one the singular and the other the plural, of the interrogative. When they had finished, their teacher again

said, '*Regardez le tableau*," and again a boy stood at the blackboard with sponge and chalk, the others, when called upon, correcting any mistakes.

A feminine noun, *la clef*, was treated in the same way, only much more rapidly.

As home-exercise, they had to write out two examples of the present indicative of *avoir*—

(1) in the singular with a masc. noun.

(2) in the plural with a fem. noun.

(3) in the interrogative form with a plural noun.

New Lesson. Dr. Dorfeld now went on with the preparation for the reading-lesson, begun the day before. "*L'auteur a écrit le livre, l'imprimeur l'a imprimé, le relieur l'a relié*," &c. At "*nous lisons des phrases*," a little uncertainty was shown by the pupils, "*Phrasen*" in German having a different signification. To help them to find the meaning of the French word, Dr. Dorfeld told them to say something in German. An unusual silence followed in the class, for which the teacher good-humouredly chaffed them a little, whereupon a bright boy promptly put up his hand, and gave the sentence, "*Reden ist Silber, Schweigen ist Gold*" (speech is silver, silence is gold). The preparation continued in much the same way as at the preceding lesson.

Finally, the books were opened, and the German was given once more, first by the teacher, then by individual pupils, after which the French was read, (1) by the teacher, (2) by individual pupils, (3) by the class simultaneously.

Throughout this second lesson, as at the first, the *Lauttafel* was always used in "spelling" new words. N.B.—The pupils always knew the sounds thoroughly, before they saw the words printed in the ordinary orthography, while at the same time, by adopting the above plan, Dr. Dorfeld avoided the confusion and loss of time occasionally arising from the use of phonetic transcription in younger classes. Mistakes were very rarely made in this class, and, whenever they did occur, they were at once corrected. There was no loss of time: I think absolutely the only pause that occurred was when Dr. Dorfeld asked them to "say something in German," in order to get at the meaning of *phrases*. The order was admirable from beginning to end, and there was evidently the most perfect understanding between teacher and pupils. The boys were bright, manly little fellows yet they ran up to the board with a step as light as it was rapid. The simultaneous repetition, too, showed how much could be done in that way, by a skilful teacher, without the least disturbance or unpleasant noise.

To say the above lessons are typical of German teaching would not be strictly true. They are among the best that I saw given to young pupils by a male teacher. I thought in many other cases that male teachers erred a little on the side of severity,

quite needlessly, too, for the discipline at the above lessons was perfect in every way, and Dr. Dorfeld did not once speak sharply to any boy, yet he never let a fault pass, and, while his lessons were full of variety, they followed a definite order, so that the boys knew exactly what was expected of them.

Before concluding this paper I should like to add a few remarks on the position of women as language teachers in Germany, which is not quite so satisfactory as most of what I saw during the six months I travelled about, going constantly in and out of schools, and talking with many teachers of both sexes. Hitherto they have hardly been allowed to take part in the higher instruction in any but private schools: it is only within the last three years that the *Oberlehrerinnen-prüfung* has been instituted, by passing which they will be qualified to teach higher subjects in the upper classes. Their activity has been confined mainly to sewing and drill, and general subjects in the lower classes. Yet most of the women whom I heard giving language lessons were to the full as capable as the men, and seemed to understand the girls a good deal better. They have not taken the initiative in the recent reform, nor have they written much on the subject, but they have entered into the spirit of it more completely, I think, than any but a few of the very ablest men, and show great skill in carrying it into effect. Contrasting the sexes as teachers of language, a head master once said to me, "Women know the language better and are more skilful teachers, but men have the advantage of a scientific and phonetic linguistic training." I cannot help looking on that as one of the strongest arguments I have heard for letting the German women have what they are seeking so temperately and earnestly—the opportunity for higher training at school and university.

For the sake of those who may not have followed the movement of reform in language teaching during the last twelve or fifteen years in Germany, I will here add some account of the main facts, giving a short list of some of the most important writings on the subject.

Dr. von Sallwürk has written an excellent article in the *Kritischer Jahresbericht über die Fortschritte der Romanischen Philologie.* As *geheimer Oberschulrat* (chief inspector of schools) he has been mainly instrumental in getting the new method introduced into the higher schools of the grand-duchy of Baden, giving it withal the impress of his own able and thoughtful mind: he thus speaks with authority on the subject, and I should like here to reproduce the substance of part of what he says. After discussing some of the pioneers of the reform and their writings, among others, A. F. Louvier, X. Ducotterd, and L. Herrig, he goes on to say, "Certain pedagogic tendencies of our time paved the way for the revolution in the method of teaching modern languages. As Herbart made the Odyssey the central starting-point for instruction in foreign languages, so the Herbartians held that all knowledge of modern languages should be

acquired in the same analytic way. The laws of a language are to be found in the language itself in a multitude of concrete examples. The separation of these from the accidents of their environment leads to the formulation of the general rule. . . . Thus pressure from various quarters was brought to bear on the teachers of modern languages, especially of French, to induce them to alter their methods. The decisive impulse was given by the pamphlet, '*Der Sprachunterricht muss umkehren*,'* which Professor Vietor published in 1882, under the pseudonym of *Quousque Tandem*. Felix Franke seconded the movement set on foot by Vietor, in his '*Die praktische Spracherlernung, auf Grund der Psychologie und der Physiologie der Sprache*.'† Vietor further called in question the claim of Latin to priority in our school-curricula, after Professor Stengel had expressed himself to the same effect in an essay 'On the aims and methods of instruction in modern languages,' important in its bearing on the elementary part of modern language instruction.

"Kühn's Programme, '*Zur Methode des französischen Unterrichts*,'‡ put these suggestions into a practical form for the use of schools. For Kühn the 'new method' consists in laying a foundation by means of elementary phonetics, in making reading the centre of the whole teaching, and in the inductive treatment of grammar. Translation from German into the foreign tongue, rejected by Vietor, is admitted by Kühn. The movement found a strong supporter in Münch, who, although a keen clear-sighted critic of the new methods, recognized the soundness of their principles, and expressed his approval of many of their innovations. In 1886 the *Neuphilologenverein* (Association of Modern Language teachers) met for the first time at Hannover, and contributed largely to the spread of the new method. It is worthy of note that the practical aims of modern language teaching were so emphasized by the whole movement that attempts to have French taught in our higher schools from a more scholarly and scientific standpoint have entirely disappeared, and G. Körting's protest against utilitarian considerations met with no response."

In the year 1884, continues Dr. von Sallwürk, the new methods found their way into the schools. The literary movement reached its height in the year 1888, which was particularly rich in theoretical discussions of the Reform. In the same year, the *Neuphilologentag* (Meeting of Modern Language teachers) at Dresden confirmed the diffusion of the new method, as well as its beneficial effects. Attacks upon it were now isolated and ineffectual.

The *Kritischer Jahresbericht* traces the movement down to the year 1891. Since then many wise words have been spoken, and many useful text-books and *Realien* have appeared. The chief subjects still under discussion are (1) the question of phonetics (v. ante); (2) the preparation of teachers; (3) the written exercises; (4) the use of translation.

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* Language teaching must be revolutionised.

† The practical learning of languages on a basis of psychology and the physiology of speech.

‡ On the method of French instruction.

For any one wishing to follow the various stages and phases of the movement down to the present day, the best periodicals to consult are *Die neueren Sprachen*, edited by Vietor and Dörr, and *Die Zeitschrift für neufranzösische Sprache und Litteratur*, edited by Behrens and G. Körting.

One of the best comprehensive discussions of French and English teaching in Germany is to be found in Münch and Glauning's *Didaktik und Methodik des französischen und englischen Unterrichts*, while many of the smaller pamphlets, and the prefaces to most of the text-books, give a very fair insight into the chief features of the new method, and the chief points at issue.

I append a short list of writings that will be found useful by the practical teacher, who might wish to gain a closer insight into the system here sketched, and apply its principles as far as may be possible under existing circumstances in England.

MARY BREBNER.

APPENDIX.

Die neueren Sprachen. Edited by Victor and Dörr. Marburg-in-Hessen: Elwert.

Die Zeitschrift für neufranzösische Sprache und Litteratur. Edited by Behrens and G. Körting. Oppeln.

Prüfungsordnung für die Kandidaten des höheren Lehramts vom 5 Februar, 1887. Berlin: Weidmann, 1896.

Prüfungsordnungen für Lehrerinnen und Schulvorsteherinnen. Berlin: Wiegandt & Grieben, 1887.

Lehrpläne und Lehraufgaben für die höheren Schulen. Berlin: Hertz, 1896.

Bestimmungen über das Mädchenschulwesen, die Lehrerinnenbidung und die Lehrerinnenprüfungen vom 31 Mai, 1894. Berlin: Hertz, 1896.

Statistisches Jahrbuch der höheren Schulen. XVII. Jahrgang. Leipzig: Teubner, 1896.

Kritischer Jahresbericht über die Fortschritte der romanischen Philologie. Edited by Karl Vollmöller, Band II., 1891–1894. Leipzig: Renger, 1896-1897.

Didaletik und Methodik des französischen und englischen Unterrichts Von Dr. Wilhelm Münch nnd Dr. Friedrich Glauning. München: Beck, 1895.

Der Französische Klassenunterricht. I. Unterstufe. Von Max Walter. Marburg: Elwert, 1888.

Der Sprachunterricht muss umkehren. Von Wilhelm Vietor (Quousque Tandem). Heilbronn: Gebr. Henninger, 1886.

Ein Jahr Erfahrungen mit der neuen Methode. Von H. Klinghardt. Marburg: Elwert, 1888.

Drei Weitere Jahre Erfahrungen mit der Imitativen Methode. Von H. Klinghardt. Marburg: Elwert, 1892.

Gelöste und Ungelöste Fragen der Methodik. Von Dr. W. Mangold Berlin: Springer, 1892.

Die Anschauung im neusprachlichen Unterricht. Von Dr. K. A. Martin Hartmann. Wien: Hölzel, 1895.

Handbuch des Höheren Mädchenschulwesens. Edited by Dr. J. Wychgram. Leipzig: Voigtländer, 1897.

The Teaching of Foreign Languages.

By PROFESSOR Dr. EMIL HAUSKNECHT, *Director of the 12th Realschule, Berlin (translated by* Mr. HAROLD W. ATKINSON, *Assistant Master at Rossall School).*

INTRODUCTION.

At the commencement of the movement for reform in Modern Language Teaching there appeared three essays in particular which more than any others have exercised a far-reaching influence on teaching methods—(1) W. Vietor's pamphlet, which appeared under the pseudonym *Quousque tandem*, "Der Sprachunterricht muss umkehren," Heilbronn, 1882; (2) Count Pfeil's essay, "Wie lernt man eine Sprache am leichtesten und besten?" Breslau, 1883; and (3) Felix Franke's little book, "Die praktische Spracherlernung auf Grund der Psychologie und Physiologie der Sprache," Heilbronn, 1884.

It is not that these essays were the cause of the movement for reform: the feeling that there was real need of a change in the manner of instruction employed in language teaching was, so to say, already in the air; in fact, this desire for reform had already found a more or less clear expression in Klotzsch (1), 1876; Lehmann (2), 1868; Louvier (3), 1864; Perthes (4), 1873; Sayce (5), 1879.

Vietor, Pfeil, and Franke were not the founders of the movement for reform, but they contributed very materially to its furtherance—more so, indeed, than any one of those just mentioned. Yet the views which were originally supported by them did not by any means contain all the demands which have been put forward by the reformers in the course of later years; and many of their views have since had light thrown upon them by other and later writers, and have undergone not inconsiderable modification and correction.

It does not fall within my purpose to give a complete historical *résumé* of the Reform movement; besides other works in which the subject has been so treated, there is a book by H. Breymann, "Die Reform-Literatur von 1876–1893," Leipzig, A. Deichert, 1895. (A history of the Phonetic movement during the years 1878–1893 is given by Bangert in the "Verhandlungen der Direktoren-Versammlung in der Provinz Schleswig-Holstein," pp. 117–184. Berlin, 1889.)

Nor is it my purpose to give at length reasons for the principles laid down in what follows. I am not in a position to offer any new principles, and it would indeed be bringing "owls to Athens" were I to raise again here long-winded

(1) "Grundzüge der französischen Grammatik." Leipzig, 1876.
(2) "Methodische Einleitung zu dem französischen Lesebuch. Berlin, 1877.
(3) "Ueber Naturgemässheit im fremdsprachlichen Unterrichte."
(4) "Zur Reform des lateinischen Unterrichts auf Gymnasien und Realgymnasien," zuerst in der Zeitschrift für das Gymnasialwesen, xxvii.; später als selbständiges Buch. Berlin, Weidmann.
(5) "How to Learn a Language." *Nature*, May 29, 1879.

theoretical discussions of principles which have long since been exhaustively described and clearly set forth—clearly set forth at least for any unprejudiced and independent thinker, while for those who are held bound in the fetters of deep-rooted custom and easy-going routine they will, I suppose, always remain a closed book (1).

My task is rather to give a few practical hints on a method of learning languages, which in school teaching even with full classes (30 to 40 pupils) leads, I am convinced, to results that are certain and thoroughly satisfactory. I have tested it personally by using it in teaching, as well as observed it in use both here in Germany and in Japan. Further, it is based on observations which I have had the opportunity of making in individual schools in North America, in which children that did not understand English were being instructed in English. This method certainly attains the following results:—

(1) It renders the pupil capable of understanding at once the foreign idiom when spoken by the teacher, so long as he uses a vocabulary known to the pupil, and that without the pupil performing in his mind the process of translation into his mother-tongue; it renders him capable of answering at once in the foreign language questions put to him in it and formed of words known to him.

(2) It leads him to a rapid and certain mastery of a comparatively large vocabulary.

(3) It gives him the capacity of understanding a passage easily and quickly on its first reading.

(4) It develops in him "Sprachgefühl" (2) and gives him a sufficient knowledge of grammar.

(5) It renders him capable of expressing freely in the foreign language, even in writing, his thoughts on any topics that appeal to him.

As conditions of success I presuppose:—

I. Fluency and correct pronunciation on the part of the teacher, especially on the part of the teacher of the elementary classes.

II. A preponderance of oral instruction—with the books shut—in all stages of language teaching, especially in the elementary stages.

III. In teaching pronunciation in the elementary stages the start must be made from sounds, not from letters; the teacher must, without teaching Phonetics, possess an adequate knowledge of the science.

(1) Here I assume that the reader is acquainted with the essays of Waetzoldt (Die Aufgabe des neusprachlichen Unterrichts und die Vorbildung der Lehrer: Berlin, Gärtner, 1892), and of Münch (Didaktik und Methodik des französischen Unterrichts, München, Beck, 1895), or, if not, that he will feel himself now stimulated to study them.

(2) *Translator's Note.*—English possesses as yet no translation for "Sprachgefühl." Dr. Hausknecht suggests, as a rendering of the word, "a sense of language." Personally, I should prefer "linguistic feeling" on the analogy of "artistic feeling" for "Kunst-gefühl." Another proposed translation is "an intuitive sense of what is correct in the language," but this is too cumbrous *for general use.*

IV. Continuous pieces for reading, not single sentences, form in the elementary stages the basis on which the vocabulary and grammar are gradually built up.

V. The grammar is to be learnt in the elementary stages inductively; by means of an abundance of isolated instances the pupil is led first to an unconscious appreciation of what is correct, and then to a conscious recognition of the grammatical law.

VI. The materials for teaching the language are so chosen and arranged that they serve in an elementary way as an introduction to the Social Conditions, the Organization, the Geography, the History, and the range of thought of the foreign people; yet the importance thus assigned to practical studies must not be carried so far that the emotional and the imaginative sides of the pupil's mind are in consequence neglected.

I will assume that we are dealing with a class of thirty to forty boys who are going through a four years' course of instruction in a foreign language (we will take French as our example), giving eight hours a week in the first two years and six hours a week in the last two. The whole school year will be reckoned, after deducting the holidays, at forty weeks.

This period of four years devoted to the acquisition of the language I should split into an introductory stage, dealing with the sounds, and three stages dealing with the language proper; the introductory and first language stage, forming together the elementary course, would embrace the first year and a half; the second stage, forming the junior course, would occupy the second year and a half, and the third stage, or senior course, the fourth year.

Introductory Stage.

Practice in the foreign sounds: The distinction between Sound and Letter must be made clear to the pupil from the very commencement. Sound and Letter are not equivalent. The pupil must recognise that while there are but six Vowel-Letters (Vokal-Buchstaben) viz. a, e, i, o, u, y; there are on the other hand a far greater number of Vowel-Sounds (Vokal-Laute). The pupil must observe that there are in French three quite distinct o-sounds (robe, rose, cor), three quite distinct ö-sounds (jeune, creux, peur), two distinct a-sounds (rat, ras), etc. From suitable examples the pupil becomes acquainted with all the sounds, not only theoretically but by actual practice. In this stage the pupil will also learn that one and the same sound is written in various ways, (*e.g.* the nasal sound ã = an, am, en, em, etc.).

For the sound-exercises the teacher pronounces the sound first, and then makes the pupil pronounce it after him. As on the drill-ground the soldier acquires the handling of his rifle only by ceaseless practice, so must the pupil's organs of hearing and speech become accustomed by ceaseless practice

to grasp a sound accurately and reproduce it clearly. The teacher must be indefatigable in pronouncing the particular sound, word, word-group, or sentence either for an individual pupil, or for several, or for a larger portion of the class or for the whole class, and in having it pronounced after him again and again, either by groups of the pupils or by the whole class in chorus. It is by means of such drill that the organs of speech must be rendered supple for the foreign sounds and sound-combinations.

It goes without saying that the teacher is not to confine himself purely and simply to the process described above; as occasion offers a few quite elementary indications as to the position and the movements of the tongue and of the lips will be of advantage. For the purposes of this occasional reference to the physiological production of the sounds the teacher requires a good knowledge of Phonetics. For the pupil, however, a systematic instruction in Phonetics is superfluous. Supposing it has been necessary in the case of a few of the more difficult sounds to give an explanation based on the physiology of sound, the pupil does not need to retain this explanation any longer than it is of service in aiding him to grasp and practise the sound. As soon as he can correctly reproduce it, he may contentedly forget its physiological explanation.

Should the sounds be practised in isolated words or in disconnected sentences, or in continuous prose passages, or in poems? For French the practice of the sounds by means of complete sentences is absolutely necessary, because it is important to make the pupil acquainted as soon as possible with the peculiarities of the voice modulation and stress in sentences and in groups of words, and with the liaison. The method which recommends itself most to my mind is that which makes use, even in the introductory stage, of single words in the first instance and later of continuous texts (prose and verse). The single words have the advantage that they facilitate a systematic arrangement of the sounds. There can often be found such words as the pupil recognises as foreign ones introduced into his own language. The practice of the foreign pronunciation of such words is no easy task. For an English pupil, for example, the pronunciation of the French word "rose" offers two difficulties that are not easily to be overcome: first, that of correctly grasping and reproducing the French "r"; then, the pronunciation of the "o," which is in English a diphthong, and in French a simple vowel-sound. Well-known proper names, too (especially those from history and geography), can be used for this purpose. If during these introductory sound-exercises there are also introduced (as is, indeed, exceedingly desirable) continuous passages, these have the further advantage that they convey at the same time a knowledge of the very simplest grammatical relations, which will render it considerably easier to take the pupils through the reading pieces of the first main stage, which must be only of a continuous character.

That the teacher must be acquainted with Phonetics has been

already said. Yet he must not have exaggerated expectations of the effectiveness of Phonetics in the class room. Further, a mere theoretical knowledge on the part of the teacher will not suffice. It must be supplemented by a residence in the foreign country, a residence that must not be cut too short, and must be often repeated.

Is a book required in the introductory stage? For the first lessons probably not at all. Later it is required for purposes of recapitulation in preparation times. It may even be used during the lesson, but never for more than a small fraction of the time; for the greater part of the lesson the method is to be purely oral, with the books shut. If the eye is needed to help the ear, in most cases the blackboard will suffice.

Is a Phonetic Script to be used in this introductory stage? Opinions are divided. Many teachers provide in the first instance phonetic texts only, and do not till later pass to the historical orthography: among others who do so are Klinghardt (1) and Walter (2).

I have no particular fault to find with such a method, but I consider it unnecessary. I know from personal experience that very good results can be attained even if the words are practised from the commencement in their historical orthography. If the pupil is shown how the sound in question looks in the transcript; if he is shown that this one sound, which in the phonetic script has but one mode of representation, has in the usual orthography often three or more, he will be materially aided in understanding the distinction between sound and letter. Further, a phonetic transcription of all the words learnt in the introductory stage —in the vocabulary—is useful as an assistance to the memory in the case of revision during preparation time. Naturally the pupil will only be required to learn the phonetic script sufficiently to be able to read it—to teach him to write it is unnecessary—and by thus limiting its use the danger of confusion of the two scripts is avoided.

The Elementary Course.

After the preparatory course of drill in sound-production lasting some four weeks, there follows the period of language acquisition proper. This may be divided into three courses—the elementary, the junior, and the senior.

The elementary course pursues three different aims, here arranged according to their importance.

(*a*) The direct comprehension of the foreign word when spoken, and the acquisition of facility in answering in the foreign tongue a question put in it—from a known vocabulary—without any conversion either actual or mental into the mother tongue being

(1) H. Klinghardt, "Ein Jahr Erfahrungen mit der neuen Methode." Marburg, 1888. "Drei weitere Jahre Erfahrungen mit der imitativen Methode." Marburg, 1892.

(2) "Phonetik und Lautschrift, in Kölbing's "Englische Studien," 1888, xi., 188.

performed in the mind of the pupil; the pupil is to learn to think in the foreign tongue; he is to acquire linguistic feeling or an intuitive sense of the language.

(*b*) Practice in the Accidence.

(*c*) The acquisition of a large store of words and phrases and the most important phenomena of Syntax, not through the medium of reflection, but chiefly by imitation and unconscious habit.

Throughout the whole of this elementary course the reading book forms the starting point and the centre of the instruction. The method is predominantly oral; all exercises—in conversation or in grammar, or in written work—are conducted by one and the same teacher. That now, as before, the very greatest weight is attached to pronunciation goes without saying. Translations from the mother tongue into the foreign tongue are entirely excluded during the whole of the elementary course.

In order that the pupil may be led as quickly as possible to think in the foreign language, three exercises are necessary:—

(*d*) Exercises for training the pupil's ear to catch, and his tongue to reproduce, whole sentences which are new combinations of old material (Hör-übungen).

(*e*) Exercises in answering questions put in the foreign tongue (Sprech-übungen).

(*f*) Dictation of passages that are variations on those of the reading book.

Exercises for Training Ear and Tongue.

After a passage—in the early stages a very short one—of the foreign language has been translated and explained, it is learnt by the pupil by heart sufficiently for him to be able to translate it back again into the foreign tongue sentence by sentence if the translation is given him. Now these exercises for ear and tongue commence. The teacher gives the pupil the previously learnt piece completely re-cast, but in no case containing words other than those already known to the pupil; the teacher must speak extempore, and must not read off to his pupils something previously written out. The pupils will then be gradually led to immediately repeat each sentence spoken by the teacher. When about six or eight pupils have repeated the sentence correctly and fluently, another pupil will be required to write the sentence which he has just heard on the black-board. A few mistakes will be corrected by the class as a whole. In this way both ear and eye are active at the same time. The sentence will now be rapidly learnt by all, rubbed out again, and again repeated by a few weak pupils individually and by the whole class in chorus. A translation of this sentence is seldom made even in the early lessons, and soon this ceases entirely, because—as the teacher will soon notice—the contents of it have been understood at once. In the same way the remaining sentences will be gone through. In the first week this is rather a slow process; but this slow progress is no loss of time. The pupils soon become accustomed to these exercises, and instead of asking six or eight pupils it will suffice

to require three or four to repeat the sentence; it can often be repeated by the whole class at once in chorus without it being written first on the board, although this latter is an excellent means of giving simultaneous practice in the orthography. The teacher gradually makes more and more changes in his sentences, using of course only known words; later he may well require that not only one sentence but two or three in succession shall be at once fluently repeated after him. He will easily attain this provided he has proceeded slowly and patiently enough at the outset. The chief aim of this exercise is that if known words are presented to the pupil in other and hitherto unknown combinations, he shall at once recognise them by their sound and grasp their meaning correctly in their new connection. Simultaneously his memory will be trained to assimilate new words and their sense and to reproduce them. This habit is acquired with scarcely any trouble to the pupil; but for the teacher, who must speak extempore and never read from notes, these exercises are somewhat more exhausting. Only now, after the pupil has learnt the meaning of the individual words in their connection in the sentence, and that in two ways (first in the process of translation and then in the new combinations) are the words set to be learnt by heart and asked for apart from their content.

Examples of such exercises for training ear and tongue are to be found in the book compiled by myself with the assistance of Mr. A. E. Twentyman, B.A. Oxon, entitled,—"The English Student." Lehrbuch zur Einführung in die englische Sprache und Landeskunde" Berlin (Wiegand und Grieben). Samples of very good exercises of this kind are also to be found in the "Französisches Unterrichtswerk," by Plattner-Heaumier (Karlsruhe, J. Bielefeld, 1897); for instance, II, i. pp. 9, 20, 30 45, 47. On page 37 of the first portion of the second part there occurs the following reading exercise:—

La vengeance de l'éléphant.

Un éléphant passait chaque jour devant la boutique d'un tailleur pour aller boire à la fontaine. Le tailleur lui donnait toujours quelque friandise et à la longue l'éléphant avait contracté l'habitude de présenter sa trompe à la fenêtre pour avoir son cadeau. Un jour le tailleur était absent. L'éléphant passa et présenta sa trompe comme d'habitude. L'apprenti le piqua avec une aiguille. L'animal s'éloigna pour aller boire, mais à la fontaine il remplit sa trompe d'eau. A son retour il passa encore la trompe par la fenêtre et mouilla son offenseur comme un canard.

This piece has been worked up twice by Plattner for the purpose of such exercises. The first re-casting, called by him "Réproduction Simplifiée," is found on p. 38:—

Un éléphant allait boire à la fontaine. Il y allait chaque jour. Il passait devant la boutique d'un tailleur. Le tailleur avait l'habitude de lui donner quelque friandise. Cet éléphant les aimait aussi. Il présenta toujours sa trompe pour avoir son cadeau. Un jour l'apprenti était seul dans la boutique. L'éléphant

passa et présenta sa trompe comme toujours. L'apprenti le piqua avec une aiguille. L'éléphant alla à la fontaine et remplit sa trompe d'eau. A son retour il mouilla l'apprenti. C'était sa vengeance.

A second re-casting of this piece is to be found on p. 47 :—

L'éléphant est un animal très doux et très intelligent. Dans une ville un de ces animaux passait toujours devant l'atelier d'un tailleur pour aller à la fontaine. Le tailleur, qui aimait les animaux, lui donnait chaque jour quelque friandise, une pomme, une poire, ou un morceau de sucre. L'éléphant s'arrêtait toujours devant la boutique pour avoir son petit cadeau. Il passait sa trompe par la fenêtre pour le prendre. Mais un jour l'apprenti était seul dans la boutique lorsque l'éléphant passa. L'apprenti n'aimait pas les animaux et leur jouait souvent un mauvais tour. Lorsque l'éléphant présenta sa trompe, il le piqua avec une aiguille. L'éléphant alla boire, et à la fontaine remplit sa trompe d'eau. Lorsque, à son retour, il passa devant l'apprenti, il lui lança l'eau à la figure.

Exercises in answering Questions put in the Foreign Tongue.

Besides thus practising each piece as an exercise for training ear and tongue, it may be worked through in a series of questions and answers. Plattner gives for example the following questions for the passage on "La vengeance de l'éléphant." Qui passait devant la boutique du tailleur? Où allait-il chaque jour? Que lui donnait le tailleur? Les éléphants aiment-ils les friandises? Quelle était l'habitude de cet animal? Par où passait-il sa trompe? Qui était seul, un jour, à la boutique? Que fit l'animal? Que remplit-il d'eau? Que fit-il de cette eau?

Naturally this is only a small portion of the large number of questions that could be put on the piece, and indeed would be put in actual teaching by every skilful teacher. The best systematic introduction to the formation of such questions and answers has, in my opinion, been given by M. Walter, in his book, "Der französische Unterricht." Marburg (Elwert) 1888. The teacher first of all puts the question, couched in simple language, in such wise that in the answer the subject of the sentence in the reading-passage is emphasised. His further questions are then so formed that there must appear in the answer the predicate, the object, the remoter object, and the adverbial limitations.

Un paysan avait remarqué que beaucoup de personnes portent des lunettes en lisant. Il entra dans la boutique d'un opticien pour en acheter une paire. (This is the beginning of the well-known tale of the peasant who could not read, and thought that to be able to do so without further difficulty he only needed to buy a pair of spectacles.) The first of these two sentences is worked up by Walter into questions and answers in the following way, (p. 18):—

1. (Subject) Qui portent des lunettes?
2. (Predicate) Que font beaucoup de personnes?

3 (Object) Que portent beaucoup de personnes ?

4. (Adverbial limitation) Quand portent-elles des lunettes ?

The answers of the pupil to the first three questions are as follows:—Beaucoup de personnes portent des lunettes, or elles portent des lunettes. The answer to the fourth contains in addition the words "en lisant." So far the question and answer deal only with a simple chief sentence. Now, however, the chief sentence can be combined with the dependent sentence.

The following questions exemplify this:—

(1.) (After the Subject):—Qui avait remarqué que beaucoup de personnes portent des lunettes en lisant ?

(2.) (After the Predicate):—Qu'est-ce que le paysan avait fait ?

(3.) (After the Object):—Qu'avait-il remarqué ?

To each of these questions is repeated the sentence, "Un paysan (or 'il') avait remarqué que beaucoup de personnes portent des lunettes en lisant." From the commencement the pupil is urged to pay close attention to the liaison, the close union of the parts of a word-group, and to emphasise his sentences according to the sense. The answers to the questions are repeated by individuals and in chorus. Whenever a few pupils do not understand the question, the teacher returns in the early stages first to the meaning of it, and then has it repeated in French.

These conversation-exercises are of course gradually made more difficult; they need not be so closely dependent on the original. In the revision-work variations should often be introduced by slightly altering the original. Thus one may re-cast the above tale in the following way (Walter, p. 36):—It can be told of several peasants, of one or of more peasant women (3rd person), or by the person in question or by the optician himself (1st person); a friend may describe the experiences to the peasant or peasants (2nd person); the tale can also be worked into dialogue form, or transposed from the past into the present.

Such modes of re-casting the tale are at the same time admirably adapted as introductory exercises to the reproduction by the pupil in his own words of an entire passage connectedly. By means of these transformations of the tale the pupil becomes accustomed to a freer handling of the subject-matter, to which at first he is inclined to cling very closely.

Should such sets of questions which aim at reproducing the contents of a passage in the form of question and answer be printed in the class-book destined for the pupil? If printed, they are at once harmful and useful. These sets of questions are injurious if they are to replace the teacher or if the teacher simply reads them out. The teacher must arrange his questions himself in his own way: he must ask them spontaneously, without ever looking at the book. The conversation must be free and un-

fettered. When he has reproduced the passage with the pupils by means of question and answer, the printed questions may be welcome to aid the pupils in revising the work by themselves in preparation. Used in this way a set of questions is useful. But such printed questions are again harmful if the pupils prepare their answers to them by anticipation. The whole object of the exercise (which, as in the case of the ear-exercises, consists in recognising at once by the ear in a hitherto unknown connection a word already known) would be absolutely and entirely missed. As soon as the pupils have attained some facility in answering such questions put to them by the teacher, the teacher will accustom them to ask one another questions, a thing which can often contribute to the liveliness of lesson time, without taking into account that the formulation of the questions is itself another new exercise for the pupils.

Dictation.

A third exercise which should be taken in connection with the reading is the dictation. In this, too, on principle no new words, no words that have not already occurred, are introduced: the pieces of dictation—similarly to the ear-exercises—are transformations and variations of the passage already studied. Here again Plattner-Haumier (II. 1, 73) offers a concrete example.

L'ambassadeur de Henri VIII.

Henri VIII., roi d'Angleterre, irrité contre François Ier, roi de France, choisit pour ambassadeur un évêque anglais. Lorsque celui-ci apprit le sujet de son ambassade et les paroles blessantes qu'il aurait à répéter, il eut peur. "Pourquoi vous effrayez-vous?" lui dit le prince, "si le roi de France osait vous faire le moindre mal, on couperait la tête à tous les Français qui seraient dans mes états." "Très bien, Sire," répondit l'évêque, "mais je pense que de toutes les têtes qu'on aurait coupées, il n'y en aurait pas une qui remplacerait la tête que j'ai sur mes épaules."

On this passage Plattner gives the following piece of dictation.

Le roi d'Angleterre Henri VIII., étant irrité contre le roi de France, lui envoya un ambassadeur. Cet ambassadeur, qui était un évêque anglais, avait une mission difficile à remplir. Le roi lui demandait de faire entendre à la cour de France des paroles blessantes. L'évêque eut peur. Il pensait que François Ier se vengerait en le tuant. Henri chercha à le rassurer: "Si le ro de France," lui dit-il, "touchait à votre personne (à un de vos cheveux), on couperait la tête à tous les Français qu'on trouverait en Angleterre." "Ce serait une terrible vengeance," répondit l'évêque, "mais de toutes ces têtes pas une seule ne serait préférable à la tête que Dieu m'a donnée."

Generally speaking the reading book will of course not provide the form of the dictation—in fact, it must not give it, lest the pupils be able to prepare themselves for it beforehand, while it ought to be an extempore exercise. The teacher must arrange the dictation himself. While the dictation in the beginning follows pretty closely the wording of the reading-matter it must

gradually become freer, until eventually its contents have scarcely anything to do with that of the reading-matter and indeed, borrow from it little more than the vocabulary.

Accidence of the Elementary Course.

In the accidence which is to be practised in this stage, the verb occupies the principal place. As with the grammar as a whole, so also the conjugation of the verb, is to be essentially inductive and derived from the reading-matter. Practice in the forms of the verb is, in principle, to be proceeded with in two ways:

(*a*) With the verb alone in individual forms.

(*b*) In an entire sentence; and the form of the sentence to be conjugated is to be taken from one of the previous reading-passages.

Thus not only is "j'aime" to be conjugated as a simple verb in all forms—interrogative, negative, interrogative-negative, backwards, forwards, and changing the order of the persons—but also, for example: j'aime les animaux, j'aime mes parents or in still more complicated sentences: j'aime les animaux et je ne leur joue pas de mauvais tours; j'aime mes parents et ils m'aiment, nous aimons nos parents et ils nous aiment, tu aimes tes parents et ils t'aiment, vous aimez vos parents et ils vous aiment; j'aime les mêmes personnes que tu aimes, nous aimons les mêmes personnes que vous aimez, tu aimes les mêmes personnes que j'aime, vous aimez les mêmes personnes que nous aimons etc.

The repetition of these exercises as often as possible and in as varied form as possible is necessary for fixing the conjugation of the verb in the memory. How varied in character these conjugation-sentences, which have to adhere as closely as possible to the reading matter, may be, is shown by Walter, among other places on pp. 39-44. It is also shown by the numerous examples in conjugation that are contained in the class-books of Plattner-Heaumier and of J. Bierbaum (Lehr-und Lesebuch der Französischen Sprache nach der analytisch-direkten Methode, Leipzig, Rossberg, 1897).

A l'école j'ai un sac: à l'école tu as un sac: à l'école, il a un sac, etc.

Dans mon sac, j'ai mon crayon: dans ton sac tu as ton crayon, etc.

Dans mon plumier, j'ai ma plume: dans notre plumier, nous avons notre plume, etc.

Dans mon cahier, j'ai mes devoirs: dans ton cahier, tu as tes devoirs, etc.

Je suis prêt à partir pour l'école: nous sommes prêts à partir pour l'école, etc.

J'ai dans mon sac tout ce qu'il me faut: tu as dans ton sac tout ce qu'il te faut: il a dans son sac tout ce qu'il lui faut, etc.

J'ai chez moi plusieurs animaux: tu as chez toi plusieurs animaux, etc.

J'entends le chant des oiseaux: tu entends le chant des oiseaux, etc.

CONJUGAISON RÉCIPROQUE.

(1) Question: Où est-ce que j'entends le chant des oiseaux?
Réponse: Tu entends le chant des oiseaux dans les champs.

(2) Question: Où entends-tu le chant des oiseaux?
Réponse: J'entends le chant des oiseaux dans les prés.

(3) Question: Où entend-il le chant des oiseaux?
Réponse: Il entend le chant des oiseaux dans la forêt, etc., etc.

J'attends à l'ombre le retour de la fraîcheur—je descends dans les prés où la fenaison a lieu—j'étends l'herbe avec ma fourche—je suspends mon travail pour me reposer—je me rends au champ où la moisson a commencé—je ne perds pas de temps et je me rends vite à la maison—je ne réponds pas parce que j'ai peur.

J'ai conduit ma mère, je l'ai conduite, etc. Est-ce que je cherche le papier?—Oui, tu le cherches (Non, tu ne le cherches pas)—Est-ce que tu cherches le papier?—Oui, je le cherche (Non, je ne le cherche pas). Demandai-je le timbre-poste?—Oui, tu le demandas, etc. Ecrivais-je la lettre?—Trouvais-je la plume? Ai-je apporté du papier à lettre?—(Oui, tu en as apporté.) Ai-je écrit de mon voyage? Porterai-je la lettre à la poste? Oui, tu l'y porteras. Me rendrai-je à Paris?—Ai-je été à Paris? Te donnerai-je l'enveloppe? Te rapporterai-je la carte postale? T'ai-je parlé de cette affaire? T'ai-je remercié de la nouvelle? Je fais ma tâche et je me tais. Je ne crois pas ce que je lis.

Je résous l'énigme et je m'en ris. Je souris et j'en conclus que je suffis à mois seul. Je ne médis de personne et ainsi je plais à tous. Je t'en fais accroire et tu me contrefais et me maudis pour si peu de chose. J'omets souvent moi-même ce que je prescris aux autres.

It is clear that in the conjugation of whole sentences more is attained than mere certainty in the forms of the verb. At the same time a facility of speech is aimed at, a mechanical acquisition of idiomatic turns, and equally unconsciously and by a sort of habit the most essential points of the syntax of the verb. In order that all this may be attained, two things are necessary:—(1) A systematic arrangement of the class-book especially in the reading passages; (2) the formation of the conjugation sentences by the teacher according to their subject matter and with a definite aim in view.

Je doute que je puisse t'en dire toute l'histoire. J'ignorais qu'il te fallût tant de peine et d'adresse. Je ne crois pas que tu te sois trompé de chemin. Je ne me doutais pas que tu fusses déjà si près. Je ne doute pas que tu ne sois un des premiers Je ne nie pas que tu ne sois pas très inconstant.

Je ne sache rien qui soit plus intéressant. Si j'eusse pu prévoir le beau temps, je serais sorti. Je souhaite que tu choisisses ce

chemin. Je permettrai que tu finisses ton déjeuner. Je trouverai bon que tu partes. Je tiens à ce que tu voies la grotte.

J'ai vu de mes propres yeux le Grand-Opéra de Paris. Je me suis pourvu de jumelles et tu t'en pourvoiras. Je suis bien assis dans ce fauteuil. Je me suis assis(e) et tu t'assiéras.

J'ai résolu de continuer mon métier. Je me suis résolu à faire une promenade avec toi. Je me suis résolu à t'entendre.

J'ai écrit à mon ancien maître, je lui ai écrit. J'ai suivi mon oncle, je l'ai suivi. J'ai suivi tes conseils, je les ai suivis. J'ai survécu de trente ans à ma mère, je lui ai survécu de trente ans.

That by such a method not only the verb, but also the accidence of the other parts of speech and the chief points in their syntax, can be practised, is quite sufficiently shown by the selections from Walter and by the examples given by Plattner-Heaumier and by Bierbaum.

The Junior Course.

After the pupil has in the elementary course acquired a certain amount of linguistic feeling or intuitive sense of the language, after he has learnt to think in the foreign tongue, after there has been developed in him to a certain degree the capacity of answering at once in the foreign tongue questions put in a suitable and easy form, and that without going through the process of converting the question into his mother tongue, after he has mastered the accidence and after he has absorbed the most important laws of syntax less by reflection than by habit and unconscious assimilation, there follows the middle stage of the language course.

The middle stage is:—

1. Primarily, that of reflective language study: the stage of grammar.
2. Secondly, that of extended conversation practice Starting from the contents of the reading-passages, there will be an intentional breaking away from them to pass to other subject-matter.

While the exercises introduced in the Elementary Course for the purpose of inculcating the grammar exclude on principle all translations of the mother tongue into the foreign tongue, now translations from the mother tongue are admitted. The chief reason which militated against the translation from the mother tongue was that a too early application of the faculty of construction and reflection hinders the development of linguistic feeling or intuitive sense of the language and renders more difficult the acquisition of fluency and facility in expressing even the simplest thoughts in the foreign tongue. From this point of view, translation from the mother tongue, now that this end has been attained, is no longer dangerous. It is indeed doubly useful. It is of use in learning the grammar of the language: it is further of importance in attaining to a deeper grasp of the grammatical relations in general, and to a clearer insight into the structure of the language. It forms in this way an excellent schooling for

the mind. Such there was already in any case in the elementary course with its varied exercises, especially its conversation practice. "What intense activity of mind is not called into play" (says J. Bierbaum in his "Die analytisch-direkte Methode des neusprachlichen Unterrichts," Cassel (Th. Kay) 1887, page 62) "in giving in a foreign language a definite and intelligent reply to a definite question! Contents, vocabulary, accidence, tense, mood, position of word and sentence, and in addition pronunciation, accent of word and sentence, all must be present to the mind and ear in unbroken succession. Such an exercise makes at least as great calls on the power of logical and formal thought as any other, with this advantage, that it relies on the concrete example and not on the abstract rule, and further that it aids the development of linguistic feeling or intuitive sense of the language instead of undermining it, and extends the materials of language at the same time."

Translation from the mother tongue into the foreign tongue is of service in giving a firmer grasp and a deeper penetration into the materials of language already known to the pupil and the grammatical laws contained in them. A feeling for that which is correct in the language has been already acquired by the pupil in the lower stage,—and indeed something more than a mere undefined and unconscious feeling: the exercises undertaken in the lower stage for inculcating the grammar, although they aimed primarily at making that which is grammatically correct unconsciously a part of the life and habit of the pupil, will not have failed to give him, and to some extent consciously, a clear insight into the grammatical relations of the language. As a further aid to the attainment of a more thorough knowledge of these relations there is now added in this part of the course translation from the mother tongue into the foreign tongue. For purposes of learning the language it is quite sufficient if these translations are free reproductions of the language material already provided in the foreign tongue. In the first instance these reproductions will adhere pretty closely to the model: it goes without saying that they are so arranged that they do really offer opportunity for practising the exercise in grammar that has just been worked through. Gradually they will, as far as the contents are concerned, become more and more remotely connected with the model given in the reading book, and as far as language is concerned,—without indeed containing any new words or idiomatic phrases—they will become more independent and free. Sentences in the mother tongue containing words or idioms not yet known to the pupil, and the translation of which he must hunt up in a note or vocabulary, have for the learning of a language but little value. "Let no man be deceived," says Perthes in his "Zur Reform des lateinischen Unterrichts auf Gymnasien und Realschulen," I. (1885), 13. "Knowledge of grammatical rules and even certainty in their application is no true linguistic training! An essential requirement is the acquisition of linguistic feeling or intuitive sense of the language. The formation of this, however, is directly hindered by such sentences containing unknown

words. Nor will translation from the mother tongue particularly aid its formation, though for acquiring a sound knowledge of the grammar it is of some considerable value."

The sentences in the mother tongue must be for the most part connected with one another in their subject-matter. If the greater part of them are of this sort, there is no need to over-anxiously avoid a few isolated sentences, provided of course that these isolated sentences are only variations and extensions of sentences that are already known to the pupil from previous reading. In this way it will be possible—if it should be necessary for rendering intelligible any particularly difficult rule—to bring again before the pupil all the sentences that have occurred which contain examples of the rule in question, either in a form that adheres fairly closely to the original or in a form that has been freely changed and extended, so that every grammatical phenomenon that hitherto has been acquired only unconsciously is by means of these variation exercises raised to the position of a grammatical phenomenon that is completely and clearly understood. It would be useful if there were collected ready in the grammar all the examples that had occurred up to that point of the study of the language.

For the acquisition too of a sounder knowledge of the meaning of words, translation from the mother tongue is of some value.

To what extent are these translation exercises from the mother tongue to be carried at this stage? I think it would be amply sufficient if the study of the systematically arranged grammar together with the translation exercises from the mother tongue occupied half of the entire time available in this stage. The grammar of this stage embraces, besides a recapitulation of the accidence, the whole of the elementary syntax (it is only the elementary syntax that belongs to the school). The grammar is studied inductively; the examples cited for the individual rules are sentences that are already known to the pupil from previous reading. If, in addition to these examples that are already within the pupil's range of knowledge, there are introduced occasionally and in limited number, a few others that are not yet known to him, there is no fault to be found. The principle of induction which is to be firmly adhered to, will not be violated by the presence of some few such examples among a greater abundance of others taken from the pupils' own range of experience.

The second half of the available time in this stage is occupied by studying and working up new language material. This material serves on the one hand as an objective material on which to base certain sections of grammar; on the other hand it will be used, as in the elementary course for pieces of dictation varied from the original and for practice in conversation.

These conversation exercises follow on the one hand the three-fold aim that they had in the elementary course; on the other hand there comes in here a fourth aim and one to which special importance is to be attached. In the lower stage the exercises in question and answer aimed primarily at reproductions or variations of the material of the reading book, and in the junior course

this exercise must indeed not be neglected. There must now, however, be introduced an extension of this conversation practice. By a systematic transition from the contents of the reading material to other matter, by a systematic emancipation of the pupil from a too close clinging to the contents of what he has read, he can be led to a freer use and a more complete mastery of the vocabulary he is acquainted with. By means of such exercises arranged with the definite object of accustoming the pupil to break away from the contents and expressions of the material given, a new impulse will be given to the development of the linguistic feeling or intuitive sense of the language, and facility in thinking in the foreign tongue will be considerably increased. Examples of such exercises will be found in particular in H. Klinghardt's Ein Jahr Erfahrungen mit der imitativen Methode, Marburg (Elwert) 1888. (Compare also, "The English Student," page 61, footnote.)

The Senior Course.

After there has been imparted in the junior course a deeper insight into the grammar by means of systematic grouping of the grammatical phenomena and by practising these in translation from the mother tongue, and after the linguistic feeling or intuitive sense of the language has been still further developed, partly by means of dictation (the passages for which are for the most part of unknown contents but with known vocabulary), and partly by what is most important of all, the extended conversation exercises, then grammar and the exercises necessary for its practice (including translation from the mother tongue), fall again into the background to make room for:—

(I.) an extensive reading of authors,
(II.) free written compositions,
(III.) enlargement of the vocabulary.

In the elementary and junior courses the reading book was the centre of the entire teaching. The passages in it were selected and arranged systematically in relation to grammar and vocabulary, and for the time being the attention was rigidly confined to and concentrated on them. They formed the starting point for the acquisition of the language and provided the entire linguistic material, which was supplemented by, at most, some few details borrowed from the immediate circle of thought of the pupil, from his natural surroundings or from the simplest and most customary incidents of school life. In the reading of authors (or, of course, of selected portions) such a minute study and such an intensive (1) attempt to derive all the profit possible from the reading matter, as was the case in the previous stages, has no place. The contents of that which is read will indeed be repeated in the foreign tongue, and the explanation of the subject-matter, which—so far as is possible—is to be given in the foreign tongue, will offer opportunity for digressions, which will

(1) *Translator's Note.*—The "intensive" method in Paedagogics signifies the method which concentrates the attention for a time rigidly to a limited field of study.

be equivalent to the extended conversation practices of the junior course. In general, however, it will be preferable in the explanations of the contents or in the recapitulation of the passage read to confine the attention to that which is necessary to the deeper grasp of the contents; the aim must be to read as much as possible and enjoy the author and his individuality. If the author is not too difficult he will be read rapidly, since the extensive vocabulary of the reading passages of the two lower stages will have provided the pupil with a large stock of words. Moreover, the already largely developed linguistic feeling or intuitive sense of the language will now prove of value. And consequently the more rapid reading and the more facile penetration into the spirit and style of the author will bring greater profit and bear richer fruit than the custom previously so much in vogue of commencing with the reading of an author as soon as the most elementary facts of grammar had been studied.

We may here ask whether all that is read is to be translated from the foreign into the mother tongue. The answer to this question varies according to the standpoint taken. From the point of view of mere acquisition of the language it is not necessary to translate everything. In easy passages a short summary or a short description in the foreign language will often suffice. If, however, that point of view is taken which considers the study of a foreign language a part of the general instruction of a school curriculum, then a moderate amount of translation will be required (oral or written) as an exercise in style in the mother tongue.

II. The written compositions which are introduced in the senior course are mainly of two kinds:—

(*a*) Free reproduction of something related to the pupils.

(*b*) Exercises in correspondence style.

The first kind is best prepared for by abundant exercises in oral reproduction of incidents related by the teacher (of course in the foreign tongue). As soon as the pupils have acquired a certain facility in this, an advance will be made to written reproductions. The teacher relates something, has the contents repeated by two or three pupils, puts a few questions in the foreign tongue to a few others, and then the pupils prepare at once in the lesson their written account of the incident. It is far better that the narration should be given by the teacher really extempore than that it should be read. Sometimes a list of headings or a rough outline of the contents of what has been read in the author, or of what has been talked of on a conversation-picture (1), will offer material for such compositions.

The exercises in correspondence style exclude all translation from the mother tongue. The pupil is made acquainted with the peculiarities of correspondence style. By means of model letters

(1) *Translator's Note.*—Conversation-picture is used for the German "Anschauungsbild." Such pictures as Hölzel's Wall Pictures of the Seasons are here referred to.

—preferably such as deal with the ordinary events of life—he learns the formal expressions of address, of commencement and of conclusion, as also the most indispensable points in the text of the letter itself, and how to address and date it, and then is instructed to write a letter, the general contents of which are specified. At the commencement such letters would be first of all gone through orally.

III. The acquisition of a suitable vocabulary is of the greatest importance in learning a language. The passages of the reading book, which occupies in the elementary and junior courses the centre of the instruction, must be selected and arranged on a definite plan with special regard to a suitable vocabulary. It would be quite wrong if, as was the case, for instance, a few years ago with a much praised class book of English for German pupils, the pupil had to learn for a year in the book without meeting with expressions like letter, post, railway, steamer, tailor, coffee, supper, mother, daughter, girl, beautiful. In the elementary and junior courses the vocabulary is to be so selected that it shall be preparatory both to the speech of everyday life and to the literary language of the authors that are to be read in the senior course. It will be difficult—nay, almost impossible—for the pupil to feel, appreciate, and enjoy the beauty and individuality of an author if he is met in each sentence by too many new and unknown words. From this point of view, as well as that already mentioned, an unduly early start in the reading of authors cannot be recommended.

The enlargement of the vocabulary in the senior course can be carried out in two ways, either by means of systematically arranged lists of words (which, by the way, is not to the taste of every one) or in connection with a collection of phrases, such as the "Französische Sprechübungen" by Johann Storm of Christiania, which impart the most essential points of grammar and phraseology in conversations taken from real life.[1]

Admirably suited too, I think, for enlarging the vocabulary are descriptions of conversation-pictures, which other writers on method call to their aid less suitably, as it seems to me, even in the elementary course, as, for instance, M. Hartmann in his very commendable book, "Die Anschauung im neusprachlichen Unterrichte." Wien: Hölzel, 1895.

Making the foreign language instruction dependent on such pictures is best by the great danger of attempting to go through and put the too large a number of words. The chief aim of foreign language instruction in schools is and will always be the reading of a sound and thoughtful literature that shall enrich the reader's thoughts and aspirations and serve as a guide to the deeper thought of the foreign people. It is a mistake to commence the study of authors too early. But to defer it too long, in the attempt to acquire an altogether too extensive and varied vocabulary, bearing either only or chiefly on the relations of ordinary life, is likewise a mistake. Is it not necessary for a

[1] [illegible] Vienna Publishers' [illegible] Kristiania, 1892.

pupil at school to learn the foreign designations of all the vegetables and of every kind of fish and fowl that appear on the market, of all the instruments used by the countryman in agriculture and at harvest time, of all the parts of a horse's harness, or all the expressions relative to the doings of the vine-dresser in his vine-culture and grape-gathering? The predominance must in any case in the elementary course be assigned to the ordinary conversational language; but a systematic limitation of it to the most necessary things must be insisted on. It cannot be the task of the school to fit out the pupil with a vocabulary that will enable him to converse on all the occurrences of daily life. If, under the guidance of the material provided for him in the reading book, he has actually learnt to speak, if he has a fair mastery of the expressions of the very commonest occurrences of school life, if he is acquainted with the words and idioms necessary for travelling (about railways, steamers, customs, tramways, hotels, restaurants, purchases, theatres, taking lodgings, ordering clothes, &c.), then, it seems to me, he is sufficiently well fitted out to be able, were he at once to begin a residence in the country, to find his way about and continue his education without trouble.

How by the aid of pictures the instruction may be made fruitful in the acquisition of expressions not only of concrete objects, but also of abstract notions and indeed of synonyms, is shown by P. Lange in his lecture:—"Beobachtungen und Erfahrungen auf dem Gebiet der Anschauungsmethode." Wien (Hölzel), 1897.

"Series"-exercises à la Gouin or à la Carré can also be advantageously employed in this stage for the rapid enlargement of the vocabulary. Gouin differs notably from Carré in that he proceeds on the basis of the subjective mental image, and goes so far as to reject the objective reality, while Carré makes his conversation practices dependent on the direct contemplation of the object. (Cf. M. Hartmann, Reiseeindrücke und Beobachtungen eines deutschen Neuphilologen in der Schweiz und in Frankreich, Leipzig (P. Stolte, 1897, page 105 ff.). Both systems possess in the hands of a skilful and lively teacher a convenient means of practising and enlarging the vocabulary. But to make them the only or even the chief means of instruction would be a mistake.

Another excellent means of enlarging the vocabulary is offered by the study of word-formation, though it appears questionable whether, if the senior course lasts only one year, there is sufficient time for it.

If the senior course extends beyond one year, and if the number of hours per week is so large that the reading of authors and the above-mentioned compositions and the enlargement of the vocabulary by other exercises need suffer no reduction, the following additional exercises can be used:—

Repetitions and extensions of what has been learnt in the grammar.

Hard pieces of dictation.

Instruction in metre, literature, and style. For the study of style O. Ulrich's "Schulgrammatik der französischen Sprache," Berlin (Gärtner), might serve as a welcome guide.

With the recapitulation of the grammar, which is at the same time an extension of what has been previously learnt, there can be to some extent combined the study of word-formation, while in the recapitulation of the accidence, everywhere that opportunity offers, other words related in their roots can be inserted—

E.g., for the adjective frais, fraîche will be immediately given; rafraîchir, le rafraîchissement.

For the verb savoir: le savoir, le savoir-vivre, savant, le savant, sage, la sagesse.

For croire: la croyance, croyable, incroyable, le crédit.

For émouvoir: l'émeute, l'émoi, l'émotion.

Cf. K. Kühn, "Entwurf eines Lehrplans für den französischen Unterricht am Realgymnasium," Marburg (Elwert), 1889, page 18.

The grammar can also be brought into connection with the reading by the teacher requiring the pupils to arrange and group together all the examples bearing on a particular section of the grammar that appear in a fairly large portion of the reading, and by again discussing these particular grammatical phenomena in the light of the examples so obtained.

Historical and comparative grammar, etymology and philology do not belong to the school; they belong, as does also the study of phonetics, to the advanced and specialised studies of the university.

THE TEACHER OF MODERN LANGUAGES IN PRUSSIAN SECONDARY SCHOOLS.

HIS EDUCATION AND PROFESSIONAL TRAINING.

SUMMARY.

Introduction:

Better methods of instruction real cause of German's superior command of modern languages. Training of teachers.

I. Prussian regulations as to training of teachers.

A. The *Reifezeugnis* (Certificate of Maturity). Comparison of English and Prussian leaving examinations. The Reifezeugnis of different types of schools.

B. The University. Comparison of main features of English and German Universities. Degree not essential to teacher. Professors of modern languages. The two schools of modern language teachers. The English University Seminar at Berlin. Pro-Seminar at Göttingen. English course at University of Berlin.

C. The *Staats-Prüfung*. General knowledge. Teacher's diploma. Special subjects. Forthcoming regulations. Insistence on knowledge of spoken language. Manner of conducting examination.

D. Professional training.

1. The Seminarjahr. Gymnasial Seminars. Royal Pedagogical Seminars. Modern Language Pedagogical Seminar in Berlin.

2. The Probejahr.

II. Prussian organisation and English individualism. Objections to present system of training. Recent growth of modern language teaching in Prussia. General educator to be preferred to specialist. Inferiority of foreigners as teachers of their native languages. Value of phonetics to teacher. True function of secondary school better understood in Prussia than in England. Foreigner indispensable as Lektor at the University. Prussian student of modern languages has not sufficient opportunity of visiting foreign countries. Foreign students at English Universities. German teachers in

English schools. Prussian Government should give greater aid to teachers while training. Further qualification of teachers. Enthusiasm of German teachers as shown by attendance at holiday courses. Permanent classes for teachers. Foreigner in schools as "Court of Appeal." Comparison of status and conditions of work of English and Prussian teachers.

Appendix I.—Most important German works consulted.

Appendix II.—The German State Universities.

Appendix III.—Details and table of Foreign Holiday Courses. 1898.

Appendix IV.—The Modern Language Association.

THE TEACHER OF MODERN LANGUAGES IN PRUSSIAN SECONDARY SCHOOLS. HIS EDUCATION AND PROFESSIONAL TRAINING.

It has been remarked by foreign critics of our educational institutions that English secondary schools are a hundred years behind those of Germany in their organisation and curricula. The two systems of schools are, however, so absolutely different, they are so entirely a result of distinct national forces, that it is futile to attempt to compare them with mathematical precision. The future alone can determine the relative value of the education which each has furnished during the nineteenth century; the comparison of common educational factors is all that is at present possible. To one such factor public attention in England has been particularly directed during recent years, and Germany's superiority in modern language instruction is now generally recognised.

Better methods of instruction real cause of German's superior command of modern languages.

The fact that young Germans have a more thorough command of modern languages* than the boys who leave our secondary schools was first remarked in commercial circles. The conclusion immediately drawn was that the gift of tongues had been bestowed on the German nation but denied to us. In the course of the inquiries undertaken in connection with this report I have obtained the opinion of many German authorities on this interesting theory. All were exceptionally qualified to pronounce, some of them being Professors at Universities where there are a number of Englishmen studying German. They were unanimous in their opinion. They stated that the Englishmen who came to Germany with the serious intention of learning the language, for example, those who further qualified for the English teaching profession by studying at a German University, showed themselves as capable of learning a foreign tongue as the Germans; but that, on the other hand, they started with a knowledge of the language, which was infinitely inferior to that command of English possessed by German boys on leaving school, and that at the same time they betrayed a lamentable ignorance of the manner in which a modern language should be learnt. These authorities had only one explanation to offer: the teaching of modern languages in English schools was unsatisfactory. The hastily formed and still widely accepted theory of the German's natural predisposition must be abandoned, and we must seek an explanation in the different conditions under which modern languages are taught in the two countries. I have already discussed the question of the position assigned to this branch of instruction in German curricula, and in the same report have referred to the methods of teaching which are employed.† The greater amount of time allotted to modern

* In connection with the Prussian teacher in this report the term Modern Languages includes only English and French.

† *See* "The Teaching of Modern Languages in Frankfurt, etc." in this volume.

languages in German schools accounts for much, and the superior methods for still more. But the better and more delicate the methods, the more chance there is of failure on the part of the teacher; the greater the number of hours devoted to a subject the greater danger there is of its becoming wearisome and uninteresting to the pupil. It is on the teacher that the successful manipulation of both depends, and it is by a careful consideration of the modern language master in German secondary schools that we shall discover the chief causes of our own inferiority.

raining of eachers.

The success of the teacher may be said to depend on three things: his knowledge of the subjects he teaches, his personality, and his acquaintance with the science of education. In England we have hitherto relied mainly on the first two of these, and have consequently, among many failures, produced a certain number of brilliant empiricists. The Germans, on the other hand, have attached equal importance to all three, and, to ensure the last, have insisted on every teacher's undergoing a course of professional training. It is sometimes advanced that all training is accompanied by a proportionate diminution of individuality. If this is so, the difficult problem presents itself: whether it is wise, in the cause of national education, to sacrifice the chance of possessing a few brilliant schoolmasters to the certainty of providing an army of competent teachers. Any training which tends to reduce the teacher to a machine, any imparting of rule-of-thumb procedure, and not of living principles, is to be deprecated, for it is a man's personality alone which inspires his teaching with the vital force necessary to raise it to an educative influence. It is now, however, the almost unanimous opinion of English authorities, including the majority of schoolmasters themselves, that some degree of training is desirable for secondary teachers.

But while we have only recently become convinced of the need for this training, and while, in spite of many experiments, we have not yet definitely solved the problem of how it may be best supplied and enforced, in Prussia the State took the matter into its own hands nearly a hundred years ago. Until the beginning of the present century secondary teachers in Prussia enjoyed a somewhat similar exemption from furnishing specific proofs of professional qualifications to that extended to the same class of teachers in England to-day. The theological examinations, including a pedagogical test, which it was necessary to pass for admission to holy orders, was considered to offer sufficient opportunity of proving a candidate's fitness for the higher teaching profession. Vacancies in the staffs of higher schools were filled in various ways, among others by an *examen pro loco*, which the patron of the school allowed a member of the Consistory to conduct. It was not until Prussia was forced to recognise that the very existence of the State depended on the higher education of the middle and upper classes that greater attention was paid to the equipment of her secondary teachers. The result of Prussia's endeavours to resist the tyranny of Napoleon is a matter of history. Her success was due to that stimulation of patriotic feeling, which was the work of certain

ministers of Frederick William III., and which culminated in the formation of the great "League of Virtue." Among the reforms of this period was the reorganisation of the educational system. I draw attention to the political position of Prussia at that time, because it is chiefly owing to the uneasiness caused in England by the rapid development of foreign nations that the demands for the reform of secondary education are daily becoming more urgent.

I.

Prussian Regulations as to Training of Teachers.

It was in 1807 that the State first instituted a separate test for teachers in the Prussian Higher Schools. The regulations for this State examination (*Staats-Prüfung*) were issued 12th July, 1810, during Wilhelm von Humboldt's short tenure of office. They were drawn up by this minister with the aid of Süvern and Schleiermacher. By these regulations (*Ordnung der Prüfung der Candidaten des höheren Schulamts*) special qualifications were demanded from those entering the higher teaching profession, and Prussia thus affirmed, what is now generally admitted in Germany, that scholarship alone could not make a teacher: in the words of L. Wiese "*dass mit der wissenschaftlichen Vorbereitung die Vorbildung für das Lehramt nicht erschöpft ist.*"

In this first *Staats-Prüfung* a knowledge of the Theory of Education and of kindred subjects was required of the candidate, who had also to give evidence in a trial lesson (*Probelektion*) of his practical ability as a teacher. This trial lesson was similar to that which still forms part of the examination of elementary school teachers in England.† In Prussia it was soon discovered to be unsatisfactory as a test, and was abolished by the minister, von Altenstein, in the decree of 24 September, 1826. A year of probation, the *Probejahr*, was established in its place. Another change was introduced in 1890, when an extra year was added to the course of professional training, the *Seminarjahr*, which precedes the *Probejahr*.

It is hardly necessary for the present purpose to trace in all its details the historical development of these regulations as to the training of secondary teachers. It will be sufficient to discuss them as they exist at the present day. Those which more particularly bear on the subject of this report are:—

1. *Ordnung der Prüfung für das Lehramt an höheren Schulen.* 5 February, 1887.

2. *Ordnung der praktischen Ausbildung der Kandidaten für das Lehramt an höheren Schulen.* 15 March, 1890.

3. *Ordnung der Reifeprüfungen an den höheren Schulen.* 6 January, 1892.*

Among the conditions of admission to the *Staats-Prüfung* are the two following:—

That the candidate must have obtained the *Reifezeugnis* (Certificate of Maturity) of one of the three types of higher schools having a nine years' course;

* Issued simultaneously with the new *Lehrpläne* of 1892.

† It is also the "practical examination" for both the Cambridge and Victoria Secondary Teachers' Diploma.

That he must in addition have spent three years at a German State University.

A. The Reifezeugnis (Certificate of Maturity).

This is the certificate given to boys who have passed the Leaving Examination (*Reifeprüfung*) of one of the Secondary Schools.* In his work on the "Higher Schools and Universities in Germany"† Matthew Arnold has placed this examination on the same level as that for an ordinary pass degree at Oxford and Cambridge, or the French *baccalauréat* of his time.‡ The Prussian *Reifeprüfung* differs from these examinations in that it is a school and not a University examination. But here it would be more useful to point out how it differs in one or two particulars from the Oxford and Cambridge Higher Certificate Examination, quite apart from the relative "difficulty" of these examinations.

Comparison of English and Prussian Leaving Examination.

In the first place the *Reifeprüfung* is not conducted by an external board of examiners, but by a Commission, which is composed of the Director of the School and those masters who teach in the highest class. This Commission is presided over by a specially appointed member of the Provincial Board of Inspectors (*Provinzial-Schul-Kollegium*). The object of this examination is to ascertain not what knowledge a boy may have of certain subjects at a given moment, but if he has duly profited from the education afforded him by the school, and is "ripe" to proceed to the University or other superior educational institutions; in short, whether at this age he has reached that stage of development requisite for his future performance of the duties of a German citizen. It must be remembered that the instruction given in the school is in conformity with the standard that the nation has set up as most favourable to its own interests. The teachers, on being appointed to these schools, bring with them a recognition of their qualifications and ability, which they have every opportunity of confirming under the eye of the authorities. Hence it is not necessary for this examination to test the teachers and the curricula, which is the primary object of the English examination referred to. The confidence in the teachers, shown by the constitution of the Prussian Examining Commission, is only possible when there are officially recognised curricula, and when the teachers themselves have obtained the sanction of the State. I shall refer, in another section of this report, to the

* For a detailed account of the *Reifeprüfung, see* Memorandum by Mr. M. E. Sadler, Royal Commission Report, vol. v., pp. 27–33.

† Macmillan and Co., 1868.

‡ *Cf.* Higher Schools and Universities in Germany, 1868 edition, p. 230. "The examination for the degree of bachelor of arts, which we place at the end of our three years' university course, is merely the *Abiturientenexamen* of Germany, the *épreuve du baccalauréat* of France, placed in both of these countries at the entrance to university studies instead of, as with us, at their close." It should, of course, be remembered that the present demands of the examination for the "pass" degree referred to are very different to what they were thirty years ago, when these words were written. And even supposing this calculation of Matthew Arnold's to have been correct, it merely takes into account the amount of book-knowledge possessed by the candidates in the respective examinations; and this is, after all, only one of the forces (according to English traditions, not the most important) which, together with others, produces the total result—education.

serious endeavour of the Prussian authorities to conduct examinations in such a manner that they shall form a real test of the candidate's education. The *Reifeprüfung* consists of written and oral divisions, great importance being attached to the latter. Prizes are not offered in connection with this examination, and little stress is laid on the obtaining of "distinctions," indeed the idea of a minority of excellence seems foreign to the principles of education as generally understood in Prussia. Neither is the French system of rivalry between different schools encouraged.

The *Reifezeugnis* also serves as the certificate of admission to certain professions and occupations in the Civil Service. That of each of the three different types of Higher Schools has a distinct value of its own as regards the *Staats-Prüfung* and the Universities. The *Reifezeugnis* of the Gymnasium (the fully classical school) admits to all branches of the *Staats-Prüfung;* that of the Realgymnasium (the semi-classical school, where Latin but not Greek is taught) allows a candidate for the higher teaching profession to qualify only in Mathematics, Natural Science, and Modern Languages as his principal subjects; that of the Oberrealschule (the higher Latin-less school) does not admit a candidate to examination in Modern Languages at the *Staats-Prüfung.* From this it may be inferred that a knowledge of Latin is regarded as indispensable to the teacher of modern languages.

The *Reifezeugnis* of different types of schools.

In the Gymnasium alone English is not one of the obligatory subjects of instruction.* The majority of the students of English come from the Realgymnasium. Professor Vietor, of Marburg, together with other eminent Professors, expressed his regret that the pupils of the Gymnasium were not more encouraged to take up English, as an acquaintance with the literature of both Greece and Rome was of the greatest value to the student of English at the University.

French is a compulsory subject in all the schools.

B. The University.

There are twenty-two State-Universities in Germany,† that is to say, Universities subsidised and, to a certain extent, controlled by the State. They have freedom to appoint their own officials, and exert great influence in the choice of Professors, nominating candidates for the approval of the Government. The State does not interfere in matters of internal management, such as examinations and courses of instruction. At these twenty-two centres there are more than 32,000 matriculated students,‡ a fact which should be taken into account in connection with the demand that every candidate for the *Staats-Prüfung* must have spent at least three years at the University, for it places this demand in a very different light to that in which it would be regarded in England. That such a much larger proportion of the German nation enjoys the benefits of the highest education is due to greater facilities and lower fees. These twenty-two Univer-

Comparison of main features of English and German Universities.

* It must however be taught as an optional subject in every Gymnasium.

† *See* Appendix II.

‡ A small proportion are, of course, foreigners. It is also interesting to notice that, in addition to these matriculated students, over 5 000 persons enjoy the privilege of attending lectures.

sities resemble one another in their main features, and it will be advisable to note briefly how these differ from those of the English type, represented by Oxford and Cambridge. In the first place there is no collegiate system, a German University being nominally composed of four separate faculties. A somewhat similar system obtains in France, but, like everything organised by Napoleon, it is a strongly centralised one, each of the four faculties being until quite recently immediately subordinate to the central authority implied by *l'Université de France.** In Germany, however, each University is a distinct and independent body, presiding over its own faculties; so that the rigid symmetry of the French Universities is avoided. Consequently, the German type may be said to hold a position midway between those of England and France, possessing much of the freedom of the former and many of the advantages of central control of the latter.†

The four faculties of the German University are:—

(1) *Die theologische Fakultät.*

(2.) *Die juristische Fakultät.*

(3) *Die medizinische Fakultät.*

(4) *Die philosophische Fakultät,* formerly called *facultas artium.*

The first three of these are sufficiently explained by their names, the last occupies itself more particularly with the work of general culture and education. It is in this faculty that all students preparing for the higher teaching profession are to be found, indeed, they form the majority of its members. It is therefore naturally to be expected that the Professors in the philosophical faculty will adapt their instruction to the requirements of these students. But neither does this nor any of the other branches of the University degenerate into a special school. In the words of Matthew Arnold‡: "It is the function of the University to develop into science the knowledge a boy brings with him from the secondary school, at the same time that it directs him towards the profession in which his knowledge may most naturally be exercised. Thus, in the University, the idea of science is primary, that of the profession secondary; in the special school, the idea of the profession is primary, that of science secondary."

University degree not essential to Teacher.

The conditions of admission to the *Staats-Prüfung* do not include the possession of any university degree, but merely stipulate that three years shall have been passed at the University. At the same time, the Doctor's examination is the natural termination of a student's University career, and, consequently, many candidates before presenting themselves for the *Staats-Prüfung* obtain the degree of Doctor of Philosophy. Many, however, for pecuniary and other reasons, fail to do so.§ It is

* This system has been recently modified, more particularly in the case of the University of Paris. *See* M. Liard's Paper.

† The Universities of Austria, Switzerland (with the possible exception of Fribourg), the Netherlands, Scandinavia, and Russia are all modelled on the German type.

‡ *Op. cit.*

§ At Berlin the University fees for this examination are about 17*l.* 15*s.*

interesting to notice that, in a country where titular distinctions would certainly appear to have greater weight than with us, although there is a certain advantage to be gained from the possession of this degree, the want of it cannot be said to handicap a teacher to any serious extent. I have met several head-masters who had merely satisfied the State regulations. The minimum course of three years at the University is generally exceeded, few students entering for the Doctor's examination before the end of their fourth year. The course of studies they pursue while at the University is naturally determined by the obligatory and optional subjects in which they will be examined in the *Staats-Prüfung*. It is only necessary here to consider the special opportunities that are offered for the study of modern languages.

Professors of Modern Languages.

The Professors of modern languages at the Universities are all Germans, and, as far as I have been able to ascertain, men who have passed through the different grades of the higher teaching profession. Subordinate to the Professor, who is responsible for his teaching and discipline, is the Lektor, whose mother tongue is generally the language which is being studied. These Lektors are poorly paid, from 75*l*. to 100*l*. a year, and it is only by giving private lessons and by other arduous work that they can possibly earn a comfortable living. Consequently, the post cannot be said to be altogether an attractive one, but it offers excellent opportunities to a foreigner who wishes to learn German under the most favourable conditions, as more than one Englishman has proved. The Lektor's duties vary in different Universities, according to the individual Professor to whom he is attached. He always lectures in his own language, and generally undertakes the more modern and less scientific side of the instruction. There seems to be great difficulty in procuring efficient French Lektors, which is not altogether to be wondered at; the authorities have generally to fall back on Belgians or Swiss.

The Professors of English whom I met had all an excellent command of the spoken languages—in at least one case a perfect command. The gentleman especially referred to, who might certainly have passed for an Englishman, had only made occasional short visits to England, and had acquired his mastery of the spoken language from Englishmen in Germany. I mention this as it points to the fact that the Prussian authorities are themselves capable of appreciating a Professor's knowledge of a language on its own merits, and are not reduced to the necessity of gauging it by the length of his residence in the foreign country—a test of variable and inconstant value.

The two schools of modern language teachers.

As in the schools, so in the Universities, the Professors of modern languages are divided into two parties. But, as both the "Reformers" and the more conservative party recognise that the scientific study of language is necessary at the University, in this highest department of the profession they differ rather as to their views on modern language teaching in the Higher Schools than in their own actual methods of instruction. To those accustomed to English ways of studying modern languages, it would appear that the majority of the University Professors agreed far more than they differed. But if the teaching in the Higher Schools were to be regulated solely by

the demands of the Universities, the difference between such views as the following could not be ignored.

Professor Morsbach, of Göttingen, desires that all boys coming to him from the schools should be well acquainted with the classical languages, and he considers "familiarity with modern languages of much less importance, as the former are the basis of all philological studies, and deficiencies in the latter can easily be made up afterwards;" whereas Professor Vietor, of Marburg, the leader of the "Reform," while fully recognising the importance of a thorough foundation of Latin and Greek for students of English literature and philology, is of opinion that a knowledge of the spoken language should form the basis of all University studies in modern languages, and consequently demands that his students should have acquired this at school. They both agree that a student, on leaving the University, ought to be able to speak the language well; but Professor Vietor not only makes this his object, but also prepares such of his students as are to be schoolmasters to teach English in the schools in accordance with the principles of the "Reformers."*

Both parties insist on the study of phonetics at the University. To quote the words of Dr. Sweet: "The importance of phonetics as the indispensable foundation of all study of language—whether that study be purely theoretical or practical as well—is now generally admitted."

The English University Seminar at Berlin.

Professor Alois Brandl, of Berlin, seems to have reconciled, in the course of studies he has planned for his students, the different views of these two parties. For this reason particularly, I select his work as an example of what is being done at the German Universities towards the equipment of the teacher of modern languages. Professor Brandl kindly allowed me to visit his English Seminar. The University Seminars must not be confounded with the pedagogical Seminars dealt with in that part of this report which is devoted to the professional training of teachers. The object of the University seminars, in this as in other subjects, is to enable students to supplement the lectures, which they have followed, by special reading and original research, under the direct superintendence of the Professor and Lektor.

Professor Brandl insists that in general only English shall be spoken in his Seminar. Professor Morsbach, of Göttingen†, on the other hand, states that five years' experience has convinced him that, if he employed only English in his Seminar, where much of his most important scientific work is done, many details would not be understood or would be only imperfectly grasped by the students. On entering the Berlin Seminar, however, one is confronted by a notice in English, which consecration of the building to the foreign language has aroused a certain amount of patriotic resentment outside the University. "Extraordinary" members are allowed to attend this Seminar on payment of a small subscription to the library. The "ordinary" members, nearly all

* I have alluded to these principles in another report. They are very ably set forth in Professor F. Spencer's essay on the teaching of French and German in "Chapters on the Aims and Practice of Teaching." Cambridge University Press, 1897.

† The English Seminar at Göttingen was the second to be founded in Germany. *Cp.* Article on "Englische Philologie," by A. Brandl, in "Die Deutschen *Universitäten*." Erster Band W. Lexis, Berlin, 1893 (A. Asher).

of whom are preparing for the teaching profession, are obliged, as a condition of admission, to satisfy the Professor that they are capable of holding a conversation in English and that their pronunciation of the language is satisfactory. They must also know the Anglo-Saxon declensions, which knowledge implies some study of Gothic.

Although I visited this Seminar during the vacation I found several students at work there, who displayed a considerable colloquial command of English. Two of them had attended the Oxford University Extension Summer Meeting of 1897, and had been very pleased with the kind reception accorded them. There was an excellent English library, giving evidence of great skill and care in the selection and classification of the books. It was up-to-date in the standard works of literature, and was regularly supplied with the chief English and American periodicals. The Government grant of 25*l.* a year had certainly not alone sufficed to supply the 4,000 volumes which it contained.

As a rule, the students in the Seminar work at a subject which has been treated in the lectures of the preceding semester*, making original investigations. The so-called *Übungen* in the Seminar consist of lectures by the seminarists themselves and the interpretation of more difficult texts, discussed from a more critical point of view than in the ordinary lectures. To quote Professor Brandl's words: "I chiefly aim at arousing a scholarly interest in English philology and literature, so that my pupils may be ready and able to think and to discover for themselves. This involves, first, a certain knowledge of all periods, but in the later terms there is a concentration on one period, culminating in a dissertation. They cannot go deeply into everything, but there should be one thing which they have fathomed, this will give them powers of criticism and method for all other work." After six semesters (as stated above, a student does not generally pass the Doctor's examination before the end of the eighth or tenth semester at the University), Professor Brandl strongly advises his students to visit England during the summer vacation, in order to attend courses of lectures, to work at an English library and to see as much as possible of English life; this being essential to a proper understanding of English literature. "Who, for instance," again to quote Professor Brandl; "can interpret a work of Dickens who has not seen London?"

Pro-Seminar at Gottingen.

At Göttingen there is a Pro-Seminar, the only one, I believe in Prussia. Here, those students who are not sufficiently advanced to profit from the instruction in the Seminar itself, are able to take a preliminary course. They are expected to spend two semesters in the Pro-Seminar. The summer semester is devoted to the study of Old and Middle English, and the winter semester to the study of Phonetics and Modern English. The members are obliged to attend regularly and to be present at at least two of the classes of the Lektor every week. This Pro-seminar was established to supply the new students with an introduction to the scientific study of English Philology, and should

* The University year is divided into two half-years (Semester).

therefore prove most useful to those boys who come from the schools where the teaching has been in harmony with the modern tendency to impart a sound knowledge of the spoken language, useful alike to those who are destined for a university career or their less fortunate companions, who only leave school to be launched into the more practical world of industry and commerce. At all events it shows what splendid opportunities are afforded for the study of English at Göttingen. Professor Morsbach has also organised, at the instance of the Ministry, special holiday courses in the summer vacation for the benefit of the teachers of the district.

English course at University of Berlin.

A complete course at a German University generally covers a period of three years. Professor Brandl kindly placed at my disposal details as to his course of lectures (apart from Seminar work), which is especially adapted to the requirements of intending teachers of English. They are reproduced here:—

Winter Semester.—Four hours a week.—Anglo-Saxon (Beowulf and general literature). Historical grammar (Part I. with study of phonetics). Interpretation of Anglo-Saxon texts.

Summer Semester.—Four hours a week.—Middle-English (Chaucer and general literature). Historical grammar (Part II.). Interpretation of Middle-English texts.

In addition to this there is during every semester a course of lectures (four hours a week) on English literature of the sixteenth to nineteenth centuries, *e.g.*

Shakespeare's predecessors in the drama (with interpretation of some play of Marlowe).

Shakespeare's contemporaries and successors (with interpretation of Spenser).

The period of English influence on German literature; Milton to Goldsmith (with interpretation of Milton or Pope).

The rise of romantic poetry (Burns, Wordsworth and Byron).

The modern period from Byron to the present day.

There is no need to give a separate account of the course of French studies, nor of those other subjects to which the teacher of modern languages is obliged to devote his attention while at the University. These are determined by the regulations for the *Staats-Prüfung*.

C. The Staats-Prüfung.

This examination consists of two parts: (1) a written examination and (2) an oral examination. It is conducted by a special Commission, appointed by the Minister of Education. Two conditions of admission have already been mentioned, but there is a special modification of the second (three years' study at a State-University) in favour of the teacher of modern languages:—one of these three years may be replaced by a year in England or a French-speaking country, or by a year at a *Hochschule*, in which the candidate has attended classes conducted in French or English. The object of this examination is to ascertain if the candidate has acquired a sufficient knowledge of certain subjects to justify his proceeding with his professional training, that

is to say, to justify his learning how to teach these subjects. In the first place, he has to satisfy the examiners that he possesses a foundation of general culture, including an acquaintance with those branches of knowledge indispensable to every teacher. This division of the examination demands (1) a knowledge of the general principles of philosophy (ethics and psychology) and of pedagogy; (2) that command of the mother-tongue and familiarity with the national literature and history, without which no one can claim to be a man of sufficient culture to hold the position of master in a secondary school; (3) evidence that the candidate has given serious reflection to the principles of the religious teaching of the church to which he belongs. It must be understood that neither is this nor any part of the examination a test of the candidate's qualifications to *teach* any of these subjects. General knowledge.

Another branch of the examination must be passed to obtain the certificate of aptitude (*Lehrerzeugnis* or *Oberlehrerzeugnis*) to teach special subjects. Many candidates succeed only in qualifying for the Teacher's certificate (*Lehrerzeugnis*), but as it is almost impossible to obtain an appointment in the great majority of the schools without a complete Upper Teacher's certificate (*Oberlehrerzeugnis*), these unsuccessful candidates generally present themselves again for examination, after their course of professional training, to which the *Lehrerzeugnis* admits. The subjects of examination are divided into two groups, principal subjects (*Hauptfächer*) and subsidiary subjects (*Nebenfächer*). The certificate discriminates between aptitude to teach these subjects in— Teacher's Diploma.

*(1) The three highest forms,

(2) The three middle forms,

(3) The three lowest forms.

There are thus three grades of aptitude recognised by this certificate, though, naturally, the third cannot be obtained for subjects (*e.g.*, English), which are not taught in the lowest forms. For the sake of abbreviation, these three grades of aptitude will henceforth be alluded to as (1), (2) and (3).

To obtain the *Oberlehrerzeugnis*, the candidate, besides passing in the general subjects referred to, must select two "distinct" subjects as *Hauptfächer* (1) and two as *Nebenfächer* (2). He is allowed, however, under certain conditions, to replace these two *Nebenfächer* (2) by one *Nebenfach* (1).

The teacher of modern languages belongs to the "linguistic and historical" branch of the profession. There is no need therefore to consider the certificates for other branches. In the "linguistic and historical" branch, the following six subjects are considered "distinct":—German, Latin, Greek, French, English, History, Geography. According to the regulations of 1887 a candidate is allowed to select his own *Hauptfächer* and Special Subjects

* To qualify for (1) the candidate must also qualify for (2) and (3), and to qualify for (2) he must also qualify for (3).

Nebenfächer, with the following restrictions, among others of same nature:—Latin as a *Hauptfach* must be accompanied by Greek as a *Nebenfach*, and similarly Greek as a *Hauptfach* must be accompanied by Latin as a *Nebenfach;* also if the candidate wishes to qualify for French or English in any of the three grades, he must qualify in Latin (3), that is to say, he must possess a thorough knowledge of Latin grammar, and be able to understand and translate the easier prose writers and poets, such as Cæsar and Ovid.

Of the several possible combinations, the one which seems to be most often selected by teachers of modern languages is French and English as *Hauptfächer*, with Latin and German as *Nebenfächer*. The most important requirements, in the three different grades for French and English, are the following:—

French (written and oral examination)—

(3) Ability to translate a fairly difficult German text into French. Correct pronunciation and a certain readiness in conversation. Knowledge of the more important grammatical rules. Ability to translate and explain French authors suitable for reading in these classes.

(2) A more scientific and detailed knowledge of grammar, and particularly of syntax. Knowledge of synonymics, and of the development of modern literature. Evidence of having read intelligently some of the works of the principal authors, particularly of those of the classical period. Acquaintance with the laws of French versification and rhyme. Fluency in conversation.

(1) In writing and speaking the candidates must not only be grammatically accurate, but must also give evidence of an intimate acquaintance with the vocabulary and idiom of the language. Sufficient knowledge of the historical development of the French language to enable the candidate to appreciate the etymological and phonetic link between French and Latin. Knowledge of Old French and of Old and Modern French versification. Thorough acquaintance with the history of French literature, and particularly with the principal authors since the seventeenth century, with detailed knowledge of at least one of their works.

English.—The requirements for (2)* are practically the same as for French (2) and (3). For (1), they differ from French chiefly in that Old French is replaced by Anglo-Saxon and Middle English, and that a knowledge of the principal authors from the end of the sixteenth century is demanded.

Forthcoming Regulations.

New regulations as to the *Staats-Prüfung* are daily expected. I was informed on high authority that these would affect the conditions referred to above in two ways. First, the candidate would be allowed complete freedom in his choice of *Hauptfächer* and *Nebenfächer*, certain combinations being merely suggested

* It must be remembered that, according to the official curricula, English is not taught in the three lowest forms.

as advisable. Secondly, the general tendency with regard to modern languages will be to demand a more practical and less theoretical and scientific knowledge of these. There seems to be considerable scepticism on the part of teachers and professors as to whether these new regulations will ever come into force. If they do they will still further emphasise the progressive tendency displayed in the *Ordnung* of 1887, when compared with the *Réglement* of 1866. It is stated in the remarks appended to the *Ordnung*, that the final proof of the highest ability to teach modern languages in secondary schools is afforded by the candidate's absolute command, in writing and speaking, of these languages in their present state of development; that it is only by keeping this ideal before him that the candidate can hope for ultimate success as a teacher; that, were the examiners to permit a knowledge of historical grammar to compensate in any way for a lack of proficiency in the modern branches of linguistic studies, the success of the teaching of modern languages in these schools would be seriously endangered. It is further added that, although it is outside the province of a *Prüfungs-Ordnung* to impose any restrictions on the teaching of modern languages at the Universities; yet great care must be taken not to discourage any interest which is shown in the study of these languages *as they exist at the present day*, by increased demands for a knowledge of historical grammar. The sketch I have given above of Prof. Brandl's English courses shows in what way the requirements of the *Ordnung* are met and interpreted by some of the Professors.

Insistence on knowledge of spoken language.

The German authorities seem to agree with us in recognising that examinations are inevitable, yet unsatisfactory as a test of education. But they differ from us in employing them as rarely as possible, and, when they are reduced to the necessity of thus testing a candidate, in sparing no pains to so conduct an examination that it shall, as far as practicable, serve its legitimate purpose. In the case of the *Staats-Prüfung*, for instance, if a candidate's application* prove satisfactory, he is given themes for three essays. He is granted six weeks for the composition of each, and he is allowed absolute freedom while thus engaged; he may spend the time where he pleases, and under whatever conditions he considers most conducive to the successful performance of his task. He has merely to give a list of the authorities whom he has consulted, and to affirm that he is indebted to no other assistance. He has little difficulty in obtaining a prolongation, within certain limits, of the time stated. It is only when further confirmation of his attainments is considered advisable that recourse is had to a written examination under supervision, though naturally this form of examination can alone meet the exigencies of certain science subjects.

Manner of conducting examinations.

Of the three themes set, one has reference to some question of Philosophy or Pedagogy, and the other two relate to each of the

* This application includes documentary evidence of having satisfied the conditions before mentioned, and also an account of the candidate's career, &c., which, if his *Hauptfächer* are modern languages, must be written by him in one of these.

Hauptfächer, which the candidate has selected, or one of them to that *Nebenfach*, in which, as stated above, he may qualify for the highest classes. Essays on French or English themes must be written in these languages respectively, and on classical themes in Latin. Those on Philosophy or Pedagogy are written in German. The oral examination deals with all the subjects, including those general ones mentioned: it is conducted in a very thorough manner. In the case of a candidate having selected English, French, or Latin as *Hauptfächer*, the oral examination is carried on in these languages, in so far as is necessary to prove his conversational command of each. We have much to learn from the Germans in our methods of conducting examinations. If a candidate has passed the doctor's examination at the University, his doctor's dissertation exempts him from an essay on the same subject.

D. Professional Training.

It was not until 1890 that the Prussian Ministerium decreed that the year of probation (*Probejahr*) should be preceded by a *Seminarjahr*.* No one is fully qualified to hold the position of teacher in a secondary school who has not gone through these two years of professional training after having passed the *Staats-Prüfung*. The Provincial Board of Inspectors of the candidate's province—that is to say, with a few possible exceptions, of the province in which he was born and educated—is responsible for providing this training.

1. *The Seminarjahr.*

The Prussian Pedagogical Seminars† are of two kinds—(*a*) the so-called Gymnasial-Seminars, and (*b*) the older Royal Pedagogical Seminars.

Gymnasial Seminars.

(*a*.) The Gymnasial-Seminars were founded in 1890 to meet the requirements of the new decree ordaining that all candidates should spend a year in a properly organised Seminar before entering upon the year of probation. The older Seminars could not alone meet the additional demands arising from this decree. It must not be imagined that these Gymnasial-Seminars are distinct institutions with a staff of professors to preside over the training of the teachers. Certain of the Higher Schools, with a complete nine years' course, are selected as offering exceptional opportunities for this professional training. From four to six candidates are attached to each of these schools. The Director and those members of his staff who are specially authorised to assist him are responsible for the training of these candidates, in addition to their ordinary school duties. For this extra responsibility they receive a small remuneration. There are nominally thirty such Seminars in Prussia, but six of them are at the present moment closed, owing to the want of candidates. The regula-

* *Cf.* Mr. J. J. Findlay's "Memorandum upon the Registration and Training of Teachers in Secondary Schools in the States of the German Empire," in vol. v. of Report of Royal Commission on Secondary Education, 1896.

† It should be borne in mind that the Seminar, in this sense, is *a group of students* under a teacher or teachers; the term does not connote a *building* or *place* of education.

tions as to professional training (*Ordnung der praktischen Ausbildung der Kandidaten für das Lehramt an höheren Schulen*, 1890) affect both the old and the new Seminars alike and it is unnecessary to draw attention to the differences between them.

Royal Pedagogical Seminars.

(*b.*) The Royal Pedagogical Seminars.—There are twelve of these *Königliche pädagogische Seminare* in Prussia, which were founded at different times. The candidates attending these receive scholarships of the value of 30*l.* a year. One of these Seminars, the *Königliches Institut zur Ausbildung von Lehrern der Neueren Sprachen*, as its title implies, is devoted exclusively to the training of the teachers of modern languages. It is a development of a Seminar founded in 1869 by Prof. Herrig to encourage the study of English, for at that date there was no professor of English, or even of French, at the University of Berlin. It is now attached to the *Königliches Französiches Gymnasium*, a school which was founded in 1689 for the benefit of the French Protestant refugees, who took shelter in Prussia on the Revocation of the Edict of Nantes.* The Director of this school, Prof. Dr. G. Schulze, is at the head of the French department of this Seminar, Prof. Dr. W. Mangold presiding over the English section. They both kindly furnished me with particulars, which give a very good idea of the course of training a teacher of modern languages undergoes during the *Seminarjahr*.† I reproduce those relating to English.

Modern Language Pedagogical Seminars in Berlin.

Throughout the first quarter of this year the members of the Seminar attend lessons given by the authorised teachers and merely take notes. They are given opportunities to discuss the observations made during these lessons. On every Saturday evening meetings are held, Prof. Schulze and Prof. Mangold presiding alternately. Discussions then take place, in French and English respectively, which are opened by the president. At least two hours a week must be devoted to these discussions. The following are some of the subjects selected during the past year; they are determined in great part by the official *Ordnung*:—

General rules for teaching.
The English Citizen Series (Macmillan).
The question of the *Canon*.
Which is the best English Grammar?
The question of *Realien*.
The teaching of Etymology in secondary schools.
Journal of a member who had recently visited England.
English Poets.
New publications for English instruction in German schools.

These weekly discussions continue throughout the whole year. In the second quarter the candidates begin to teach under supervision. According to the regulations, they must devote two to

* It still differs from other Prussian secondary schools in that from *Unter-Tertia* upwards all the instruction is given in French, with the exception of lessons in religion and the mother-tongue. Of course all the teachers are now Germans.

† The course here described is in strict conformity with the state regulations, and is similar to that of the Gymnasial-Seminar in the same subject.

three hours a week to this practical work. At first the Director assists in the preparation of these lessons, and advises as to the methods to be employed. While a candidate is giving a lesson the other members of the Seminar are present, as well as the Director of the Seminar and the master of the class which is being taught.* Immediately after the lesson they all meet to discuss and criticise. Besides this practice, discussion and criticism, the candidates take an active part in the general life of the school, and are given every opportunity of becoming acquainted with school organisation and curricula. When it is possible they are encouraged to visit a neighbouring primary school and a Training College for elementary teachers.

Towards the end of the *Seminarjahr*, the candidates write essays (in this instance in English), which are corrected by Prof. Mangold and forwarded by him to the *Provinzial-Schul-Kollegium*, together with a detailed report of the ability that each candidate has displayed, and the progress that he has made. On this report depends the official permission to enter upon the second year of professional training, the *Probejahr*. The following are a few of the subjects of these essays:—

How to read Shakespeare with a class (*e.g.*, Coriolanus).

Is it necessary to use school books for the teaching of synonyms?

Sonnenschein's *Parallel Grammar Series*.

Is Etymology a fit subject to be taught in schools?

Dr. Arnold as an educator.

Should Goldsmith's "Vicar of Wakefield" be read in our schools?

Narration of life of Dickens to *Prima*.

At present there are only four ordinary members attending this Seminar and twelve "extraordinary" members, the latter being teachers of a certain definite standing, who are anxious to improve themselves by following part of this course of training. This is the only Seminar in Prussia which undertakes the training of the teachers of modern languages exclusively.

2. *The Probejahr.*

From the purely educational point of view, two years cannot be considered an excessive amount of time to be spent in professional training. While the *Seminarjahr* is chiefly devoted to the theoretical side of the training, the *Probejahr* gives the candidate an opportunity of teaching under supervision and of practically testing his own powers and the theoretical knowledge which he has acquired; it also leaves him with sufficient free time at his disposal for reflection, reading, and discussion. In this year the hours of actual teaching are increased to eight or twelve a week. The candidate receives no remuneration; but in

* These lessons are always given in the foreign language. Professor Dr. M. Simon kindly allowed me to be present at such a lesson in his school, the Klinger-Oberrealschule in Frankfurt-on-Main, one of the only two schools of this type to which a Seminar is attached. So far as I could judge the pupils suffered in no way from the presence of so many mere observers.

certain cases he is allowed to give as many as twenty lessons a week and then receives a small salary. A school with a complete nine years' course is allowed to have as many as three candidates attached to its staff, but those with a shorter course may not take more than two. The candidate now becomes, with certain necessary restrictions, one of the regular staff of the school; he is admitted to the masters' conferences, though without some of the privileges of a fully-appointed teacher. During the first quarter of the year he teaches under constant supervision, but subsequently the officially authorised master or masters need only be present at his lessons twice a month, criticising them carefully and discussing any points which may arise. Towards the end of the year the candidate must draw up a report on his own teaching-ability and progress, and this is sent to the Provincial Board of Inspectors, together with the reports of the masters who have directed this year of his training. These various reports, supplemented by the observations of the *Departments-räthe* furnish the material from which the Provincial Board of Inspectors forms its decision as to his qualifications for the higher teaching profession. The candidate has generally the right of appeal to the Minister of Education against an adverse decision.

II.

Prussian organisation and English individualism.

There is a general impression in England that all Prussian organisation is on military lines. It is a mistake, however, to imagine that the regulations as to the training of secondary teachers, even in their present form, tend to produce rigid uniformity. On the other hand, it cannot be said that they meet with the approval of the German individualists, and it is, in all probability, partly owing to their protests that the forthcoming *Ordnung* will be more elastic, and will allow freer play to the personality of the candidate throughout the two years that he is under their influence. Much attention has been paid of late years to our English educational system, and more particularly to the absolute freedom which we allow to the development of the individuality of masters and pupils. The Germans are not blind to the advantages of our "freedom, elasticity and variety," while we on our side have much to learn from their organisation. Germany has an extraordinary power of selecting and assimilating what is best in foreign systems. It is not therefore beyond the range of possibility that both nations should arrive ultimately at something like a common system of professional training for secondary teachers. It would appear, however, that, so long as the present difference between the national conditions remains so great, the German system would, for several reasons, need to be even less rigid than the one which would best meet our requirements. For instance, it must be remembered that the influence of one year's compulsory military service is by no means a negligible factor in the training of the German teacher. The general opinion seems to be that this military service is a discipline of the highest moral and physical value, and more than compensates for any

loss of time which a candidate's studies may suffer. Indeed, it is a rare event to meet a Prussian educationist who thinks otherwise. It is invaluable morally, because it supplies the teacher with a thorough course of training in the more mechanical forms of discipline and method, but for this very reason, the greatest possible liberty, during the *Seminarjahr* and *Probejahr*, is essential to the preservation of his individuality.

Objections to present system of training.

The *Gymnasial-Seminar* system is the object of much adverse criticism. Even those authorities who approve of it in theory are dissatisfied with its present practical development. There are many who consider that the more theoretical side of the training of secondary teachers can only be adequately supplied by a department of the University, and the success of Professor Rein's Pedagogical University Seminar at Jena, which provides a course preparatory to the more exclusively practical training, certainly goes far to support their views.* Others, again, would like to see Seminars established on the model of those for elementary teachers, with secondary schools attached to them.

One of the principal causes which led to the institution of the *Seminarjahr*, in addition to the *Probejahr*, was the difficulty experienced by headmasters in finding time to attend to the candidates under their direction. A Prussian Director has not only the duties of an English headmaster to perform,† but also those of a secretary and to a large extent of an assistant-master These in themselves demand all his time and energies. Certainly, by increasing the duration of the candidate's training, the Government has insured his obtaining a greater amount of instruction from the Directors, but not adequate attention during either of the separate years. In this lies one of the most serious objections to the Gymnasial-Seminar system. It might be removed by lightening the Director's work in connection with the school, but this would necessitate further expenditure. At present the remuneration granted to the Directors and officially authorised professors of these Seminars by no means corresponds to the labour imposed on them. The general consensus of opinion in Prussia seems to be in favour of an improved Gymnasial-Seminar system, and adverse to the University system. When the nation is in a position to provide more funds for the purpose there is no doubt that it will be raised to a high level of perfection. A step has been taken recently in the right direction by the establishment of chairs of Pedagogy at two of the Universities,‡ thus giving the students the opportunity of studying the theory of education before entering upon their professional training.

* H. G. Brjoska, a pupil of Herbart, was the first to propose the foundation of this Seminar. His premature death and the impracticability of the scheme he propounded account for its not being established under his direction. *Cf.* Die Notwendigkeit pädagogischer Seminare auf der Unversitat. Re-edited by Dr. W. Rein, Leipzig, 1887.

† I do not of course mean to imply that the German Director is harassed by all the worries of an unorganised system like the English headmaster.

‡ Geheimrat W. Münch, who is best known in England as probably the first authority on the teaching of modern languages, has recently been transferred from Coblentz, where he held the position of Provinzial-Schulrat, to the newly founded Chair of Pedagogy in the University of Berlin.

The objection that some of the professors in the Gymnasial-Seminars are not properly qualified to superintend the candidate's work, owing to their ignorance of Pedagogy, and more particularly of the best methods of modern language teaching, is a minor one, and, if well founded, points to a fault in the carrying out of the system rather than in the system itself. This, and many of the objections of the supporters of the University system, might be met by providing opportunities for the candidates, while they are at the Seminar, to attend courses of lectures on theory and method by an outside Professor. In fact, such a Professor, with sufficient time and opportunities to study the theoretical and philosophical side of the subject, might be appointed as general director of all the candidates in a given district.

Recent growth of modern language teaching in Prussia.

It is only during the latter half of the present century, and more especially during the last decade, that modern languages have been raised to the high position which they now occupy in the curricula of German secondary schools. The reaction which followed the French influence of the eighteenth century was to a great extent responsible for the slight esteem in which modern languages were held during the earlier part of this. I do not refer only to the influence of such men as Voltaire, baneful as it was for the struggling and rising national literature, but rather to that of the numerous Frenchmen engaged in various minor occupations in Germany, who are typically represented in Lessing's "Minna von Barnhelm." The members of the *Tugendbund*, before referred to, and the generation that succeeded them, could hardly be expected to look with a favourable eye on the study of modern languages in the schools and universities. Indeed, so little was it encouraged that in an important university like that of Berlin there was no Professor of French prior to Professor Tobler, who still holds the post, and no Professor of English before Professor Zupitza, the immediate predecessor of Professor Brandl. In studying the present system of education in Germany, it must never be forgotten that it was the direct outcome of a great stimulation of patriotic feeling, and that its first aim is still the fostering of patriotism and the promotion of the welfare of the nation. The foreigner can take no important part in this national education.

General educator to be preferred to specialist.

The status of the teacher of modern languages in Germany is in every way equal to that of the teachers of other subjects, his salary and chances of promotion being the same. The authorities are indeed of opinion that the special teacher should be merged in the educator, that their primary object should be to provide teachers capable of supplying that education in secondary schools which will produce the most useful citizens. First the educator, then the teacher of modern languages, was a maxim repeated in various forms by every German authority whom I consulted on the subject of this report. Hence there is a dread of encouraging specialisation even in this branch of the profession. For instance, some of the teachers themselves have recently been complaining that it is impossible for anyone to teach more than one foreign language satisfactorily in a

higher school, and have pointed to what they considered the superiority in this respect of the regulations obtaining in France.* But this complaint has had no influence on the authorities, who have drawn up the forthcoming *Ordnung*; specialisation will be even more discouraged in the future.

This view of the function of the teacher of modern languages, the necessity of so developing his general educational powers that they shall act with the most beneficial effect on the future citizen, the conviction that all teachers must be possessed of a common motor educative force, which shall direct and regulate the various currents of communication with their pupils, explains the absolute impossibility of employing foreigners in the German schools. But in those towns where the commercial spirit reigns supreme, experiments have been made from time to time in private institutions with foreigners as teachers of their own languages. These experiments were carefully watched, as all rational educational experiments are watched in Germany. I made a point, therefore, of asking every authority I met what was his opinion of the results obtained by these foreigners, quite apart from the higher question of education. One and all assured me that the German teacher was able to arrive at better results in every respect. Among those consulted, I need only mention Geheimrat W. Münch and Regierungs-und Schulrat S. Waetzold, who have had every opportunity of observing the teaching of modern languages in all grades of the profession.

Inferiority of foreigners as teachers of their native languages.

My object being to throw some light on that phase of this question which is still so warmly discussed in England, there is no need for me to emphasise those points on which English and German authorities are agreed. But in connection with the recognised difficulty of the foreign teacher in maintaining discipline, it may be worth while to mention that even many of the foreign Lektors at the Universities, so I was informed, are at a great disadvantage owing to this difficulty. The fact that the German teacher is far more successful in German schools than the foreigner is beyond dispute. I shall attempt to summarise as briefly as possible the theoretical explanations of this fact which were offered me. In the first place it is held that the teacher must be able to appreciate fully the position of the pupil with regard to the language he is learning. This necessitates the teacher's having started on his own study of the language from the same base as the pupil. He who has learnt a foreign language through diligent and scientific study is better able to teach it than one who has acquired it as his mother-tongue, in a sense unconsciously and without any experience of its difficulties. It is, of course, admitted that it is impossible for any German to possess the same command of foreign pronunciation, intonation and idiom as the foreigner, though the attainment

* *Cf.* The lecture of Dr. Rossmann at the Köln Conference of 1895, included in Verhandlungen der dreiundvierzigsten Versammlung deutscher Philologen und Schulmänner in Köln. F. Teubner, Leipzig, 1896.

of this command must be the ideal of every teacher. So that the foreigner may be said in these three respects to stand on the summit of perfection. But he very soon discovers that it is useless to attempt to bring his pupils up to the same level, and so sets up a false standard, which he considers good enough for the German pupils, and the highest that, in his opinion, they can reach. Now the standard of the German teacher is perfection, and, though he may have fallen short of it himself, experience has proved that, in his unceasing endeavours to rise to it, he raises his pupils above that false standard invented by the foreigner, which generally consists of those German sounds, etc., roughly approximating to the foreign ones.*

Value of phonetics to teacher.

Absolute incorrectness of pronunciation is impossible for the German teacher who has studied phonetics, and can always appeal to a phonetic dictionary when in doubt, and who, by his study of phonetics, has become familiar with all the paths which lead from the German base to the foreign sounds; so that while in this and other respects he can conduct his pupils along the lines of communication between the two languages, the foreigner can only call to them from a distance, and, even if he can advance part of the way to meet them, cannot accompany them in the most difficult of all steps, the first. The German teacher of modern languages in higher schools cannot raise his pupils to the summit of perfection, but then German educationists have grasped the fact that it is not requisite that he should do so, and in this show a more practical appreciation of the function of the secondary school than their English fellows. *Qui trop embrasse mal étreint.*

True function of secondary school better understood in Prussia than in England.

Foreigner indispensable as Lecktor at the University.

It is at the University that the foreigner is indispensable. With his absolute command of the pronunciation, intonation and idiom of his own language he can, in the subordinate position of Lektor, supplement the work of the German Professor, and continue, as he alone is fully qualified to do, the instruction of the secondary schoolmaster in these three most important details. But it is essential that the Lektors should be continually renewed. To justify their position they must speak their mother-tongue in its native purity, and this is bound to deteriorate after several years in a foreign environment. Consequently, when the constant supply of new Lektors is uncertain, the authorities might as well appoint highly qualified Germans to these posts. This has occasionally been done; but should it become generally necessary, there is no doubt that the attainments of the students, and more especially of the future teachers of modern languages, will not be of that high order which has hitherto characterised them.

Prussian student of modern languages has not sufficient opportunity of visiting foreign countries.

From the details which have been given of the teacher's professional training, it will be seen that, according to the Prussian system, he is, during this period, under the direction of masters in secondary schools. Therefore, these all being Germans, the modern language candidate does not necessarily come into contact with any foreigner after leaving the University. He is allowed, however, to spend half of his *Probejahr* abroad. It is

* *Cf.* German *haus* and English *house*.

admitted on all sides that a residence of at least six months in foreign countries, at some time previous to the termination of the *Probejahr*, should be enforced, though opinions differ as to the exact point at which it should take place. Some authorities hold that it would be most useful during the University course, others during the *Probejahr*. This might very well be left to the decision of the individual candidate. It is certain, however, that at present the *Ordnung* must not be made more exacting, as already the supply of newly-qualified modern language teachers is gradually decreasing. The State does nothing to assist these candidates to visit foreign countries. The objection advanced, that it is impossible for the Government to grant scholarships for this purpose, owing to the difficulty of obtaining any guarantee that the recipients will ultimately enter the profession, is surely not an insurmountable one. In France, there are from eighteen to twenty such scholarships, tenable for two years, granted annually.

Foreign students at English Universities.

A student's exemption from a year of the University course on the condition that he spends it abroad has already been referred to. It seems of doubtful benefit for the student of English. He would thus attend only two-thirds of such a carefully organised series of studies as those described above, and it is difficult to see what part of this could be adequately replaced by a visit to England. Were it possible for German students to follow courses of lectures at an English University, corresponding in some degree to those they would miss at their own, this regulation would be of the utmost value. But an insuperable difficulty immediately arises; the fees and other expenses of English University life, at any rate at the older Universities, are utterly beyond the means of the great majority of those German students who are preparing for the higher teaching profession. Perhaps, some day, the English Universities may see their way to granting special privileges to foreign students of this class. It should not be forgotten that many Englishmen on leaving college, are enabled to spend some time at a German University, thanks to the low fees, and the English teaching profession owes much to these men. The English Universities might make some more systematic return for the advantage our teaching profession has thus derived from Germany. At the present moment the question of the number of foreign students at the German Universities is being warmly discussed. In France there is a very strong feeling, especially among the Professors of English, that England should allow certain advantages to French students in return for the privilege, not denied to Englishmen, of attending lectures at the French Universities without the payment of any fees. Now that the question of the training of English secondary teachers is being seriously considered, the benefits to be derived from an interchange of privileges between the Universities and Training Colleges of England, France, and Germany are not to be ignored. I have good reason for believing that Germany would welcome gladly any advance on the part of England towards some understanding of the sort.

German teachers in English schools.

Until recently we have been providing the Germans with, what would appear to be, excellent opportunities of residing in England and of learning our language free of expense. Many Germans have taught their own and other tongues in our schools and have returned to their country as teachers of English. It is now yearly becoming more difficult for them to obtain these posts in England. All the German authorities are of opinion that, in the interests of education, we should employ Englishmen as teachers of modern languages in our own schools, and not only do they discuss the matter in a spirit of absolute fairness, but admit that we have rarely had the most efficient German teachers among us. Most of them say that they will welcome the day when their teachers cannot obtain posts in English schools, for then they will be obliged to spend a certain time in this country devoting the whole of their energies to the study of English, and not merely picking up the language in their spare hours or in the class-room.

Prussian Government should give greater aid to teachers while training.

It is certain that the Prussian Government or Municipalities will have to do more towards providing the expenses of their teachers' training. It must not be imagined, however, that the seven or more years, which a teacher devotes to his preparation and training, represent anything approaching the cost of a similar course of studies in England. One of the leading University Professors informed me that while a student his total expenses (exclusive of dress) did not exceed £60 a year. There are numerous small scholarships at the different universities, and I was told that it was possible, with their aid, for a student who had no private means to obtain the best education that the University offers. But these scholarships are only awarded to those who really need them. They are not competed for as prizes, because their original donors intended them for the benefit of poor students, and the rich German parents seem to object to being the recipients of charity. A Professor has generally little difficulty in obtaining such aid for anyone whom he considers deserving. For instance, a Professor, whom I met, having discovered that one of his most brilliant students of English was supporting himself by giving private lessons, and knowing that such work interfered seriously with his studies, persuaded the University to award him scholarships in its gift, which removed this necessity. I was informed that it was possible for a candidate to support himself by giving private lessons during the two years of professional training, and that many had done so.

It can hardly be said that the Prussian Government goes out of its way to encourage the sons of poor parents, and particularly of those in the lower ranks of society, to enter the higher teaching profession. But then it must be remembered that the best Prussian secondary and university education is far cheaper than the best English. At the same time, there is a strong feeling among some Germans that, "Through education alone can man become man, and he is nothing but what education makes of him"; consequently these men consider that there must be something lacking in a man, whose earliest years have

been spent in the company and under the influence of uneducated people. It is not the place here to discuss this theory, which opens a keenly disputed pedagogical controversy, and also leads to that social question which is destined to play so important a part in the organisation of education throughout Europe in the near future. That the want of official encouragement does not prevent the sons of poor parents from finding their way into the profession is evident from the lists giving the occupations of the parents of the candidates attending the Seminars.

Further qualification of teachers.

No account of the preparation and training of teachers of modern languages in Prussia would be complete, did it omit to notice the opportunities for further qualification that are enjoyed by the teachers after they have definitely entered the profession. While unwilling to assist the *candidate*, the Government is not opposed theoretically to granting aid to the fully qualified *teacher* of modern languages. For this purpose the sum of 300*l.* is yearly set aside, to be divided into six *Reisestipendien* (travelling scholarships) of 50*l.* each, to enable such teachers to spend six months abroad. Thus six of the masters in the 572 Prussian secondary schools are sent annually by the Government to spend six months in those countries where the languages they are teaching are spoken. In addition to this, some of the Municipalities provide similar aid for masters in their own schools. Frankfurt a/M. for example, grants one such scholarship yearly. In all cases a teacher is supplied to do the work of the master while he is absent. Unfortunately this assistance does not generally come until a man is thirty years of age, and, in many cases, married. If the authorities are unable to grant more than the above mentioned sum, perhaps it is applied most usefully in this manner: for a teacher of some experience is fully alive to those needs which residence in a foreign country can alone supply.

Enthusiasm of German teachers as shown by attendance at Holiday Courses.

Nothing is more characteristic of the spirit which animates German teachers, and which is the chief factor accounting for the success of German schools, than the manner in which they embrace every opportunity of perfecting their knowledge of the subjects they teach. The German Holiday Courses for teachers are so well known in England that it is not necessary here to describe them.* If there is but little opportunity given officially to the teachers to come into contact with foreigners in the course of their training, they themselves have done their utmost to atone for this later on. The Swiss Holiday Courses were originally organised solely to meet the demands of German teachers: and of the 326 men and women attending the courses of the *Alliance Française*, held in Paris in 1896, no less than 137 were Germans, nearly all of them teachers. A large number also take advantage of the University Extension and Edinburgh Courses.

Permanent classes for teachers.

Particularly interesting are the permanent classes, which owe their institution to Professor Otto Kabisch, of Berlin. There is no reason why similar classes should not meet with

* See Appendix III.

equal success in the larger English towns. They originated in a suggestion of Professor Kabisch that some use should be made of the number of well-educated young Frenchmen, who, having passed their *licence*, were studying in Berlin for the special *licence pour l'allemand*, or the *agrégation;* that here was an opportunity of bringing the teachers of French into contact with cultured Frenchmen. Lectures were started by Professor Bernard Bouvier, the French Lektor, in the winter of 1887, which 60 to 70 teachers attended. Classes were also held, and the movement was given a fresh impetus by the famous December Conference of 1890 and the new *Lehrpläne* of 1892, which required that every teacher of modern languages in all classes should be able to speak the language he taught. It is interesting to observe the encouragement that was given to the movement by the Municipality of Berlin. At first a subsidy of 25*l.* was granted and three travelling scholarships of the value of 25*l.* each were founded, enabling teachers in Municipal Schools to spend five weeks of their holidays abroad. In 1892 both the amount of the grant and the number of the scholarships were doubled. In 1896 there were no less than 15 French and English "Circles" in Berlin, each consisting of about eight men or women teachers, meeting regularly under the direction of an Englishman or Frenchman for practice in conversation. Similar permanent classes are now held in other towns, those in Frankfurt a/M, organised by Director Walter, having met with particular success. The Berlin Holiday Courses, in connection with the permanent classes, are excellently organised, and furnish a striking example of the manner in which the Government encourages and aids all individual efforts which it is satisfied deserve its sanction.

Foreigner in schools as "court of appeal."

Several Headmasters in England have recently stated that they consider the presence of at any rate one foreigner advisable in their schools; for in case of any difficulty arising he would be able to act on questions of idiom and pronunciation as a "court of appeal." Some of the German teachers whom I consulted admitted that a "court of appeal" would be an advantage, but thought that the only way in which this luxury could be provided would be by placing a qualified foreigner at the disposal of all the teachers in each town. But they added that there were few towns in Germany in which a teacher could not find a foreigner for himself in case of his needing to appeal to such an authority; and where permanent classes existed the need was met.

Comparison of status and conditions of work of English and Prussian teachers

For many reasons the teacher of modern languages in the Prussian secondary schools must be an object of envy to his less fortunate English colleagues. The former receives a higher salary on entering the profession (if we except a few of the larger English Public Schools), is sure of a regular periodical increase, and may finally claim an adequate pension. In these respects no distinction is made between the teachers of different subjects. It is hardly necessary to enlarge on the benefits derived by secondary education in Germany from the encouragement which thus is offered to the teachers to remain in the profession, and

from the removal of all necessity for seeking to supplement an insufficient salary by outside work.

There is one other advantage, which it is impossible to over estimate, though it is strange that it should be necessary to bring it before the notice of English authorities. In hardly any school is the teacher allowed to give more than twenty lessons a week. Nobody can accuse the Germans of possessing less power of endurance than the English, and yet it is considered by the former that a teacher of modern languages cannot exceed this number of weekly lessons with any chance of success. The general opinion is that even this number is too great, and I was informed that probably, owing to the representations of many experts, it would in the near future be reduced to eighteen. A German teacher never enters the class-room with a lesson unprepared, and to this preparation and to "corrections" he is expected to devote from twelve to sixteen hours a week.

The status of the teacher of modern languages in English secondary schools is unsatisfactory, his salary, in the majority of cases, is insufficient in itself to remove that anxiety which imperils his success as an educator, his want of special training places him, at the commencement of his career, in a position which would not be tolerated in any other profession; these are all points which call for the immediate attention of those interested in the education of the nation. But whatever reforms are introduced, nothing can compensate for the disadvantage he suffers, when compared with the German teacher, from the regulations obtaining in many of our schools as to the number of hours he must devote weekly to actual class teaching. It is impossible to speak too strongly on this point. It is no exaggeration to say that as long as this state of affairs continues all other reforms are futile. When it is remembered that the great majority of English secondary schools are under-staffed, even in the opinion of those educationists who do not recognise, or rather are ignorant of, the claims of the teachers to more time for preparation and "corrections"; and when it is remembered that they are under-staffed owing to want of funds, he who despairs of any sensible improvement in our methods of modern language instruction, under our present educational system, cannot be accused of pessimism.

FABIAN WARE.

Appendix I.

I give a list of a few of the principal German works consulted on the teacher and teaching of modern languages :—

The Preparation of the Teacher:

Vietor, Einführung in das Studium der englischen Philologie. Marburg, 1897.

Koschwitz, Anleitung zum Studium der französischen Philologie. Marburg, 1897.

Waetzold, Die Aufgabe des neusprachlichen Unterrichts und die Vorbildung der Lehrer. Berlin, 1892.

Münch, Welche Anrüstung fur das neusprachliche Lehramt ist vom Standpunkt der Schule aus wünschenswert? (Die Neueren Sprachen, Band IV., Heft 6). Marburg, 1896.

W. Rein, Aus dem pädagogischen Universitäts-Seminar zu Jena. Drittes Heft, 1891.

Methods of Modern Language Teaching:

Vietor, Der Sprachunterricht muss umkehren von Quousque tandem. Heilbronn, 1882.

Kühn, Zur Methode des französischen Sprachunterrichts. Wiesbaden, 1883.

Münch, Zur Förderung des französischen Unterrichts. Heilbronn, 1883.

Klinghardt, Ein Jahr Erfahrungen mit der neuen Methode. Marburg, 1888.

Walter, Der französische Klassenunterricht, I. Unterstufe. Marburg, 1888.

Quiehl, Einführung in die französische Aussprache. Marburg, 1889.

Stiehler, Streifzüge auf dem Gebiet der neusprachlichen Reformbewegungen. Marburg, 1890 and 1891.

Klinghardt, Drei weitere Jahre Erfahrungen mit der imitativen Methode. Marburg, 1892.

Mangold, Gelöste und ungelöste Fragen der Methodik, etc. Berlin, Springer, 1892.

Münch und Glauning, Didaktik und Methodik des französischen und englischen Unterrichts (Baumeister's "Handbuch der Erziehungs und Unterrichtslehre für höhere Schulen"). München, 1895.

Mangold, Methodische Fragen des englischen Unterrichts. Berlin, Springer, 1896.

Vietor, Dörr & Rambeau, Die Neueren Sprachen (periodical devoted to question of Modern Language Teaching and the Study of Phonetics). Marburg, Elwert.

Appendix II.

The German State Universities, 1897.

	Date of Foundation.	Number of Staff.	Matriculated Students	
			Philosoph. Facult.	Total.
Berlin	1809	378	1,861	4,705
Bonn	1818	142	765	1,889
Braunsberg *	1568	10	?	?
Breslau	1702	162	380	1,541
Erlangen	1743	69	203	1,140
Freiburg, i. B.	1457	112	253	1,449
Giessen	1607	74	169	663
Göttingen	1737	124	410	1,123
Greifswald	1456	91	95	834
Halle	1694	154	540	1,534
Heidelberg	1385	143	467	1,230
Jena	1558	97	269	704
Kiel	1665	99	137	727
Königsberg	1544	116	165	695
Leipzig	1409	212	1,045	3,064
Marburg	1527	98	356	1,042
München	1826	182	1,011	3,871
Münster *	1780	45	187	487
Rostock	1419	48	227	499
Strassburg	1621	137	293	1,016
Tübingen	1477	95	114	1,289
Würzburg	1582	83	260	1,430

The best opportunities for Englishmen wishing to study German are not to be found at those Universities where there is an exceptionally large number of students, nor at those which are situated in small towns where there is an English colony.

* Academy, but recognised as equivalent to a State University in the various regulations referred to.

Appendix III.

The accompanying Table of Holiday Courses for Instruction in Modern Languages is only intended to serve as a guide to students in their application for further details; the particulars given should in all cases be verified by direct communication with the secretaries, whose names and addresses will be found in the sixth vertical column.

With regard to the facts quoted it may be mentioned that there is often no reason why third-class rail should not be substituted for second. A little more time must then be allowed, as the foreign express trains seldom include third-class. Residents in Scotland or the north of England who do not object to a longer sea-passage will find the routes from several of the northern ports, such as Leith, Hull, Grimsby, &c., to Hamburg, Rotterdam, and Antwerp a great saving of expense in travelling to Germany. Greifswald, for instance, could be more easily and less expensively reached by steamer to Hamburg and thence by rail. Residents in the west and south-west of England, travelling to France, may prefer the Southampton routes.

The secretaries will generally supply applicants with a list of *pensions*, &c., but the little hand-book "Holiday Resorts," issued by the Teachers' Guild will always be found useful and reliable. The excursions, &c., in connection with these courses are arranged as economically as possible.

No student should attend the advanced courses who has not some knowledge of the spoken language. All are strongly advised, for the sake of satisfactory progress, to avoid the company of their own countrymen. It is a matter of regret that in the past the English have rarely been as successful at these courses as students of other nationalities, owing in a great measure to their not availing themselves properly of the opportunities offered for conversation. It might be insisted that those who have obtained scholarships from county councils, or other bodies, should spend their time exclusively in the society of the people whose language they are studying;* but at a time when there is such urgent need, in the interests of the nation, for the better equipment of English teachers of modern languages, one may surely rely on each individual student to exercise that self-restraint which can alone ensure his success.

F. W.

* In connection with the Marburg course a reading party in French and German has been organised by Mr. Shaw Jeffrey of Clifton College. An undertaking to speak no English during the stay in Marburg is a condition of admission to this party. The experiment should prove of great value to the organisers of future courses.

THE PRINCIPAL FOREIGN HOLIDAY COURSES, 1898. *

Where held.	Date	Fees.	Return Fares from London, 1st Class Steamer, 2nd Class Railway.	Lowest Cost of "Pension" per Day.	For further information address:	Important Details.	Principal Subjects, &c.
GERMANY:							
Bonn	August 8–20	20 marks	2*l.* 18*s.* 9*d.*	3 to 4 marks	Fräulein J. Gottschalk, Hofgartenstr. 7.	For women only. No special arrangements for foreigners. Chiefly for German teachers. Suitable for advanced foreign students.	Literature, history, and German language.
Greifswald	1st course, July 4–29; 2nd course, Aug. 1–12	20 marks / 15 marks / 30 marks	8*l.* 1*s.*	3 to 4 marks	Herrn Prof. Dr. Schmidt, Langestr. 31.	For teachers of both sexes. Special conversation classes for foreigners, conducted on most modern methods.	German and French history and literature. Methods of modern language teaching.
Jena	August 3–16 (conversation classes continue until August 23).	Entrance, 5 marks. Each course of 12 lectures, 15 marks. Conversation classes (18 lessons and six excursions) 30 marks.	(To Weimar) 4*l.* 9*s.* 3*d.*	3 to 4 marks	Herrn Hugo Weinmannn, Spitzweidenweg. 4.	For teachers of both sexes. Special lectures on pedagogy and literature, and conversation classes (elementary and advanced) for foreigners.	Natural science, history of art, mental and moral science, pedagogy, religion, German language, and literature.
Marburg	July 4–19; Aug. 15–Sept. 9.	Each course, 20 marks for all lectures.	About 4*l.* (über Giessen).	5 marks	Herrn Professor Dr. Koschwitz, Universitätstrasse 40; or P. Shaw Jeffrey, Esq., Clifton College, Bristol.	For teachers of both sexes. Conversation and phonetics, special attention to pronunciation. Debates in French and German.	Standard German speech (Vietor). German, English, and French Literature and Philology.
FRANCE:							
Caen	August 1–29	2*l.* 2*s.*, if name is entered before July 15, otherwise 2*l.* 5*s.*	1*l.* 12*s.*	5 francs	H. B. Garrod, Esq., 74, Gower-street, London, W.C.	Under management of special committee appointed by the Teachers' Guild. To promote a knowledge of the French language, customs, &c., among English people.	French literature, history, language, political and economic aspects of France. Phonetics.

Tours	August 1–22	As above	(To Paris) 2*l.* 10*s.* 3*d.* (Paris to Tours) about 14*s.* 6*d.*	6 francs	As above	As above	As above
Paris	1st course, July 1–31; 2nd course, August 1–31.	150 francs admits to both courses. Each lecture 1 franc. Each conversation class 50 centimes.	2*l.* 10*s.* 3*d.*	5 francs	Monsieur le Sécretaire, l'Alliance Française, rue de Grenelle, 45.	Elementary and advanced courses. Special courses on history of French art and institutions. Conversation classes.	Classical and modern French language and literature, elocution and pronunciation.
Paris	Christmas and Easter Holidays.	25 francs per week	As above	As above	Monsieur le Secrétaire, Université Hall, Boulevard St. Michel, 95.	Preparatory to summer courses of l'Alliance Française.	Study of French in groups of three or four.
SWITZERLAND:							
Geneva	1st course, July 16–August 28; 2nd course, October 1–21.	40 francs / 20 francs	5*l.* 11*s.* 1*d.*	5 francs	Monsieur Bernard Bouvier, Bourg-de-Four, 10, Geneva.	Specially intended for advanced foreign students of both sexes, more particularly Germans; further arrangements are being made for English students.	Modern French literature, special classes for study of spoken language, and methods of teaching.
Lausanne	July 19—August 27	30 francs	5*l.* 1*s.* 4*d.*	4 francs	Monsieur J. Bonnard, Avenue Davel 4, Lausanne.	For foreigners of both sexes.	History, literature, and philology; phonetics; special study of spoken language.
Neuchatel	1st course, July 13—August 9. 2nd course, August 10—September 6.	25 francs / 25 francs	4*l.* 19*s.* 6*d.*	5 francs	Monsieur P. Dessoulavy, Académie de Neuchatel.	For foreigners of both sexes. Elementary and advanced courses.	General study of French language and literature.

* This information has already been published, by the courtesy of some English newspapers and educational magazines, in order that it might be of service to English teachers wishing to avail themselves of the holiday courses arranged for the present year.

Appendix IV.

The Modern Language Association.

The fact that the English schoolmaster is alive to the urgent need for the better teaching of Modern Languages, is evident to anyone who has followed the rapid development of the Modern Language Association. It was not until December 1892, that the teachers of Modern Languages in England recognised the necessity of united action on somewhat similar lines to that of the German Neuphilologen-Verein. The Association then founded, chiefly by the efforts of the late J. J. Beuzemaker, B.A., and the Rev. W. Stuart Macgowan, LL.D., now numbers in its ranks nearly three hundred members, including almost every distinguished and enthusiastic supporter of this branch of education. Largely through the efforts of its able officers and committee, it has already done much towards the attainment of its primary objects, namely:—"to raise the standard of efficiency in Modern Languages, to promote their study in schools, and to obtain for them their proper status in the Educational Curricula of the country . . . . and to help Modern Language Teachers, both men and women, by making them feel that they are not isolated units, but a learned body professionally trained* and qualified no less than the Teachers of Classics and Mathematics."

Whatever influence, and it has not been small, the Association has already had on the Universities and other educational bodies has been for the good; and considering the obstacles it has had to contend with, and remembering that it is still a young voice in the profession, it is to be congratulated on having given a very necessary orientation to the general tendency of Modern Language Teaching in this country.

The Association has perhaps paid most attention to the status and qualifications of the English teachers of foreign languages, and it is certainly on behalf of these members that its best and most fruitful work is to be done in the future. But it should never be forgotten that the *élite* of the foreign teachers in England, who for years had borne the brunt of the opposition to placing Modern Language Teaching on a higher plane, have heartily co-operated in all the efforts of the Association. Consequently however great its sympathy may be for the English teacher, who is alone capable of making this branch of instruction thoroughly educative, it has already shown its respect and consideration for the many able foreign teachers who are at present among us, and it will doubtless continue to give these its ungrudging support.

The Association has of course still much to do which is of the utmost importance, and is every day becoming more urgent. Perhaps its first work is to devote immediate attention to the difficult problem of the training of teachers. It is to be hoped that it will soon be prepared to take a definite line on this question and will make its voice heard in every discussion on the subject which is undertaken by other bodies. It is unnecessary here to lay emphasis on the fact that, not only the education of the nation, but also the interests of the teacher can best be furthered by some such narrowing of the gates and hedging in of the profession. Training alone will remove that want of a basis of discussion which is felt by many teachers, and it will enable English Modern Language Teachers to work out their own salvation, by careful consideration of our peculiar national requirements and not merely by transplanting foreign methods and systems.

It is to be hoped that more will be done in the future to develop the provincial branches. A general meeting once a year, for a few hours in the

* This term is of course only used relatively

afternoon, hardly offers sufficient opportunity for an exchange of views among the members. Owing to the want of periodical meetings of the various branches there is a danger of too great a dependence on the central council. At present the Association's organ, *The Modern Quarterly of Languages and Literature*, furnishes the only means of communication between members in different parts of the country throughout the course of the year.

In the few years of its existence this Association has succeeded in disturbing the apathy of the English public and of the various educational bodies with regard to the Teaching of Modern Languages. Such an achievement is sufficient evidence of exceptional strength and vitality.

All particulars may be obtained from the Hon. Secretary, whose name will be found in the following list :--

President for 1898 : A. T. Pollard, M.A., Headmaster of the City of London School.

Former Presidents : The Rt. Hon. Prof. Max Müller, Oxford. H. Weston Eve, M.A., Dean of the College of Preceptors, Headmaster of University College School. Rev. W. Haig-Brown, D.D., LL.D., Master of the Charterhouse. Rev. R. S. de Courcy Laffan, M.A., Principal of Cheltenham College. Rev. J. E. C. Welldon, M.A., Headmaster of Harrow School.

Hon. Secretary : W. G. Lipscomb, M.A., University College School, London.

Hon. Treasurer : de V. Payen Payne, King's College School, Wimbledon Common.

Chairman of Committee : F. Storr, B.A., Merchant Taylors' School.

F. W.

HIGHER COMMERCIAL EDUCATION AT ANTWERP, LEIPZIG, PARIS, AND HAVRE.

Analysis of Contents.

I. Introduction. The various grades of "Commercial Education."

II. Constitution and Programme of the Institut Supérieur de Commerce at Antwerp.

III. Its relation to the State. Some account of the teaching.

IV. History of the Institute. Its place in the commercial world of Belgium. The Association of former students. Its public character. Discipline.

V. The new Handelshochschule at Leipzig. Its relation to the Leipzig Chamber of Commerce, the University of Leipzig and the Saxon Government. Its aims. The bearing of German Secondary (especially non-classical secondary) education on the problem of Higher Commercial Schools. Scheme for the establishment of Higher Commercial Schools in other parts of Germany.

VI. The French Écoles Supérieures de Commerce. Statistics. Relation to the State. Government grants. Travelling scholarships. The École des Hautes Études Commerciales in Paris. The effects of the Law granting exemption from two years' military service. French criticisms of Higher Schools of Commerce. The École Supérieure de Commerce at Havre. Monsieur Dany's views.

VII. The arguments for and against High Schools of Commerce. General agreement on certain points, *e.g.*, against premature specialisation in commercial subjects in secondary schools; and the need for better teaching of modern languages in secondary schools. The different kinds of specialised training needed by different forms of business life. Day Courses and Evening Courses—How far compatible. The kind of secondary education likely to prove the best preparation for business life. General conclusions. Postscript.

Appendices.

I. A London Banker's views on the educational equipment of English youths entering business life.

II. Time-table of work of the Institut Supérieur de Commerce at Antwerp.

III. Programme of studies, etc., of the Higher School of Commerce at Antwerp (Institut Supérieur de Commerce), including the curriculum of the third year's course of study.

IV. Scale of marks awarded in the examinations at the Institut Supérieur de Commerce at Antwerp.

V. Programme of its Entrance Examination.

VI. Regulations of the Handelshochschule at Leipzig.

VII. Regulations for the award of the Travelling Commercial Scholarships, given by the French Ministry of Commerce and Industry.

VIII. Select bibliography on higher and other grades of Commercial Education.

I.

In common parlance, the phrase "Commercial Education" is loosely used as covering a number of quite different things. First, it may signify the evening classes, in such subjects as book-keeping, typewriting, and commercial arithmetic, which youths and young women attend in increasing numbers in all industrial countries, with a view to better equipping themselves in the technical qualifications of clerkship. Secondly the phrase may mean a sort of secondary, or intermediate training, the curriculum of which is exclusively occupied with "modern" studies and is so devised as at any rate "not to spoil a lad for business life by filling his mind with a lot of things which will be of no use to him afterwards." In German-speaking countries and in Scandinavia "modern" secondary education of this type has recently made important strides. The "Realschulen" are a principal cause of German success in modern commerce. Something is being done in this direction in our own country, but it must be confessed that in England the phrase "commercial education" still suffers from rather sordid associations. It is often rather a cry of angry protest against misplaced and mechanical kinds of classical education, than the mark of any very definite achievement in the direction of educational reform. In the mouths of some who use it, it rather implies active dislike of Latin grammar than a clear conception of some alternative discipline. In England, this kind of "commercial education" often enjoys the conventional epithet "sound," but it is apt to be more attractive in a prospectus than adequate to the purpose which it is supposed to have in view. "Modern" secondary education, if it is to hold its own against a good classical education, needs to be very good indeed. It has still to make its tradition. It has still to think out the fundamental principles of its curriculum. It has still to improve its methods of teaching, especially in the teaching of modern languages. But it will indisputably play a great part in the future.* Thirdly, the expression "commercial education" is used in yet a different, and even higher, sense, viz., the highly specialised training which, coming as the crown of a broad secondary education, aims at doing the work, to quote Mr. Brereton's phrase, of a commercial Woolwich or Sandhurst.

Each of these grades or types of commercial education is receiving at the present time increasingly close attention on the part of the public, of governments, and of educational authorities, in all countries to which commercial prosperity is a matter of vital importance. The trend of opinion and of national activities is now so definitely in a commercial direction that education is naturally being so adjusted as the better to

* Reference may here be made to a paper by the present writer on "*The Realschulen of Berlin, and their bearing on Questions of Secondary and Commercial Education.*" printed in the "Special Reports on Educational Subjects," 1896-7. (London, Eyre & Spottiswoode).

serve commercial ends. But it has already become clear that the three objects defined above are entirely distinct; that they call for different treatment, different kinds of teachers, different methods of organisation and supply; and that nothing but confusion and waste result from attempts to mix them up or combine them.

The aim of the present paper is to describe certain efforts which are being made on the continent of Europe to provide the highest grade of commercial education—the kind of advanced and specialised training which a young doctor gets at the hospitals, a young lawyer in the lectures provided by the Inns of Court, a candidate for holy orders at a theological college, and a young publicist at the celebrated École Libre des Science Politiques in Paris, or at our own School of Economics and Political Science in London. Whether, indeed, these analogies hold good, is a subject of controversy. Some of the most eminent leaders of commercial enterprise, both in this country and elsewhere, deny that any school of commerce can make a man of business, just as the headmasters of some great secondary schools in England (though not elsewhere) question whether any training school can make a competent man into a better teacher. Some of the pros and cons in this discussion are stated below; but, in the meantime, it will be admitted that the fact of France, Germany and Belgium, not to speak of Austria-Hungary, Italy, the United States of America and Japan, all showing a steadily increasing interest in this highest branch of commercial education, is at least an indication of its importance under the changing conditions of international trade.

II.

The Institut Supérieur de Commerce at Antwerp aims at being a University for the future merchant and at the special training of those to whom the consular service of the country will ultimately be entrusted. It is a public institution. It is under the inspection of the State. Its Professors are Civil Servants. The Belgian Government pays three-quarters of its annual cost and the Municipality of Antwerp the rest. The latter is responsible for the erection and up-keep of the buildings, and for its equipment. The annual subsidy of the State amounts to £1,800; that of the Municipality to £600. The spacious new buildings, to which the Institute has lately been transferred, have cost the City of Antwerp £20,000. In November, 1897, when I visited the institution, by permission of the Belgian Minister for Trade and Labour, and of Dr. Grandgaignage, its distinguished director, its students numbered 233. Of these no less than 90 were foreigners, the Belgian Government welcoming students from other countries, and finding that the associations thus formed are indirectly helpful to the furtherance of Belgian trade. The Institute has a staff of fourteen professors, and two Répétiteurs or Assistants, exclusive of the Director, who himself takes a small but important part in the instruction. The normal course extends over two years, but a supplementary, though optional, year's work has

recently been added to the curriculum. Each student pays a fee of about £10 for the first year, and of about £12 for the second. These fees go towards increasing the salaries of the professors. The complete first year's course includes the following subjects:—First and foremost, the routine of a merchant's office, including practical instruction in advanced commercial arithmetic, rates of exchange, average and marine assurance, bills of lading, the execution of charter-parties, calculation of the values of foreign weights and measures, and commercial correspondence in various languages; next, the history of commercial products, political economy and statistics, commercial and industrial geography, the elements of commercial law, with the following modern languages:—German, English, Dutch (obligatory on Belgian students), and either Spanish, Italian or Russian. The second year's course carries forward the instruction of the above subjects to a higher stage, laying special stress on commercial law, and on the study of tariffs, and adding a weekly practical discourse designed to acquaint the students with the main regulating conditions of modern shipbuilding.

The students fall into two categories—those who enter their names for certain subjects only, and those who undertake the full course. The latter form the majority. They are required to pass an examination for entrance, the subjects being a composition in French; a translation from French into English and German; physical geography; the outlines of universal history (a special period being announced beforehand); commercial arithmetic and the elements of bookkeeping; the elements of algebra and geometry; the elements of physics and chemistry; commercial law and political economy. The entrance examination is held once a year, early in October, and is conducted by a Board nominated by the Minister of Trade. No one is advised to present himself for admission under the age of 17. Students, who have passed the leaving examination in a recognised Belgian secondary school, or have obtained the leaving certificate in a German secondary school with a nine years' course, are excused from the entrance examination, provided that their leaving or other certificate shows that they have a competent knowledge of all the subjects above named. Thus the work of the Institute bases itself upon the foundation of a liberal education, to be previously obtained by the student in a good secondary school. Students coming from classical schools have to pass the entrance examination in bookkeeping, political economy, commercial law, arithmetic, and chemistry. These regulations may be modified in the case of foreign students. Attached to the Institute is a preparatory course, in which those who so desire can obtain, at a fee of £4, special preparation for the entrance test. This course lasts from Easter to the beginning of August. The student who has passed the entrance examination is recognised as an élève de première année. At the end of the year he has to undergo an examen de passage, which is conducted by the teaching staff of the Institute. At intervals throughout the year the students are tested by oral and written examinations, and the results of these frequent tests are reckoned into the aggregate of marks obtained in the annual exami-

nations. The scales of marks awarded in the examinations are given in the Appendix. In the case of the "examen de passage," and of the "examen de sortie," a student's place is fixed by averaging the place won by him in the examination itself and in the aggregate of the examinations held during the twelve months preceding. It is strongly felt by the authorities of the Institute to be undesirable to place a student according to the result of a single examination. His work during the whole year is taken into account, and this arrangement has a salutary effect on the student's industry and application. At the end of the student's second year comes the severe final test—the Examen de Sortie. The Board of Examiners in this case is nominated by the Government and Municipality, but always includes some representative of the teaching staff. To show how practical is the point of view taken in the examination, it may be well to mention that last year the Board of Examiners included a retired Consul-General, who has served Belgium with distinction in many countries; one of the most eminent of the merchants in Antwerp engaged in foreign trade, and another very well known merchant who himself writes with authority on economic questions. The first of these three gentlemen was specially chosen in order to judge the candidates' fitness for consular appointments. The second was specially chosen to conduct the examination in business knowledge, while the third was appointed with special reference to the examination in practical political economy. With these three examiners were associated a professor from the University of Brussels, and three professors from the staff of the Institute itself. This is a strong board—strong alike in practical knowledge and in academic qualification. It awards to the candidates who are successful in the final examination, diplomas of merit (diplômes de capacité). But these diplomas are not lightly given. Last year two-thirds of the candidates for the diplomas were, as we should say, "ploughed." Great stress is laid upon the necessity of keeping the standard high. I myself heard some of the students grumble at the rejection of a number of industrious students who, as they thought, had deserved success. But the professors are resolutely in favour of confining the diploma of the Institute to those who are both industrious and clever. "We do not want to give our diplomas to bookworms, however plodding," I heard one of them say; "we require distinct promise of business faculty, as well as a high standard of knowledge." There is no doubt that they are right. The reputation of the Institute will ultimately depend on their tenacity in maintaining the standard. Otherwise, its diplomas will come to mean very little—possibly worse than little—in the practical world of trade.

Already the diplomas are highly valued by business men. The fact that they are awarded by a Board of Examiners, thus combining practical knowledge with academic distinction, adds to their prestige. They confer the title of "Licencié en Sciences commerciales," and this, in a land where badges of honour are not lightly esteemed, is perhaps of more account in the Belgian work-a-day world than it would be in London. Another and very real advantage conferred by the diploma is that it qualifies the student to obtain one of the travelling scholarships

awarded by the Government in order to encourage commercial inquiry and report. This is one of the most important features of the system. The State makes an annual grant of £1,800 a year to provide these travelling scholarships (Bourses de voyage)—travelling studentships for commercial research, as they may be called. This form of subsidy, which is additional to the annual grant made to the Institute, has been imitated by the French Government. The object of the travelling studentships is to enable young men to extend their practical knowledge of commercial life to that of non-European countries. The studentships are worth £200 or £250 a year, according to the country which the student chooses to visit. It is important that the money value of these research studentships should be large. Otherwise they do not enable the holders to undertake journeys which, though costly at the time, may lead to the development of lucrative markets. They are tenable for three years. Students holding these scholarships have gone, in former years, to the Cape, the Argentine Republic, Brazil, the United States, Canada, Mexico, China, Japan, British India, Australia, and New Zealand. It is a condition attached to these "prize fellowships for commercial research" that the holder should at half-yearly intervals report to the Belgian Government as to openings for Belgian trade. In Antwerp I heard that the results of this system were regarded as highly satisfactory. The Belgian Government means to have skilled outposts in every part of the world, watching and reporting upon the course of trade. Most of the young men who started by holding these travelling scholarships have remained in business in the countries upon which they were originally sent to report. They find and seize business openings there. Some have been, or are, Consuls or Vice-Consuls for Belgium at Calcutta, Sydney, Melbourne, Buenos Ayres, Odessa, and Yokohama. The scheme is intended to have a close bearing on the future of the Belgian Consular Service. Most of the Belgian Consuls of the future will be trained at the Institut Supérieur de Commerce at Antwerp. The third year of study there—now just introduced—will be one of the chief entrances to consular life, but the Government properly reserves to itself the right of free selection for consular vacancies, in case it thinks well to appoint an engineer, or other expert, trained elsewhere. In short, however, it may be said that the Belgian Government has resolved to create a highly trained commercial consular service to act as an Intelligence Department for Belgian trade. In the Common Room of the Institute I heard a professor read aloud, from a report prepared by a former student, a list of the wares which it behoved Belgian traders to have ready for sale along the new line of railroad in course of construction by the Egyptian Government into the Soudan.

In this connection, it may be pointed out that such Higher Commercial Institutes, as that of Antwerp, are likely to do a valuable work in training men who will be eminently fitted to write on commercial subjects for the Press. The function of the Special Correspondent is becoming increasingly important. The courses at the

Institute are well adapted to give a young man the kind of general knowledge of trade questions which would best fit him (if he possesses the journalistic faculty to start with) for the duties of a Special Correspondent commissioned to inquire into and report on the trade openings in new or distant countries. I heard at Antwerp that a young man, who has recently passed through the Institute, is distinguishing himself by his management of a newspaper which pays special attention to commercial questions and to the development of new markets for Belgian goods.

Besides those who are undertaking the full course, other students are allowed, on what is called "Inscription Spéciale," to take one or more of the various courses of instruction offered in the programme. These "occasional students" are not required to pass any examination, nor of course are they entitled to sit for the diploma. They pay for each course, with the exception mentioned below, a fee of 30 francs, reduced to 15 francs in case of renewal. These students are admitted at any period of the course. For the "Bureau Commercial"—the course of instruction in business knowledge which is the pivot of the educational work of the Institute—they pay £4 a year. But no student may enter for the "Bureau Commercial" unless he takes at least four other courses of either year.

The courses begin in the second week of October in each year. There are three vacations—the first from 24th December to 5th or 6th January, the second extending from the Monday in Holy Week to the Tuesday sen'night after Easter, and the "long" from August 15th to the second Tuesday in October. The lectures are given in French. The work of the Bureau Commercial is conducted in the principal modern languages. It will thus be seen that a good knowledge of foreign tongues is an indispensable qualification for the courses. Without it a student would get little advantage from the Institution. I was told by one of the professors that an ordinary English boy would fail in the entrance examination in foreign languages. Not that my informant thought by any means that the Englishman is naturally ill-fitted for the study of living languages. There is indeed abundant proof to the contrary. But he maintained, and doubtless with good reason, that the ordinary methods of teaching foreign languages in use in most English schools are behind the time. Happily there are many signs of reform, and the Modern Language Association is helping forward a movement which may revolutionise the position of modern language-teaching in our schools. There is great and urgent need for this reform. It is the foundation of the best preparation for modern commercial life. Without it, much other commercial teaching will be comparatively fruitless. Belgium, Germany, and Scandinavia have much to teach us in this matter. What is really wanted is the training of a much larger number of highly skilled and highly educated English teachers of modern languages. Many such are already working in our schools—but we need far more, and we also need a higher standard of public expectation in the matter of foreign language-teaching. Other countries have shot ahead of us in this branch of

education. They have found that foreigners cannot do the work so well as their own people can, if the latter are properly trained. But the training is an arduous and costly business, and it requires, as an essential pre-condition, a high standard of general culture in the teacher. An ill-educated man cannot master the principles on which all good language-teaching depends. Of the bearing of the good teaching of modern languages on our commercial interests it is hardly necessary to say much. The need explains itself. Our Consular reports frequently deplore the inferiority of the average English commercial traveller in the use of foreign tongues. To quote only one of these, Mr. Wilfrid Powell, H.M. Consul at Stettin, in his report of October 21st, 1897, thus alludes to the question:—

"How many British boys on leaving school or the universities to face life in a business which is world-wide, can speak with fluency or even tolerably any language other than their own? They have—it is true—a certain knowledge of Latin, which is very useful, and a smattering of Greek, which is useful probably for the Church or in the learned professions alone, but could they proceed to France or Germany or Spain and be able to make themselves understood?

"Undoubtedly the far greater majority of British lads on the completion of their education become what is vaguely termed men of business, and at the present day it is an absolute necessity for the carrying on of that business against the keen competition—which, owing to European peace, has manifested itself in foreign lands during the last twenty-five years—that we, as 'a nation of merchants,' should be able to deal with our customers in their own tongues, and for this purpose it is of the utmost importance that the youth of Great Britain should be instructed for the most part in living languages."*

Elsewhere in the present volume the wider bearings of this educational question are discussed. It is not only for commercial reasons that first-rate teaching of modern languages is needed in secondary schools. The purely intellectual as well as the commercial interests of the nation seem to call for it. But for commercial purposes it is obviously an urgent need. And this, not merely in order that our commercial travellers may, as has been humorously said, excel in "the arts of solicitation," but that our men of business generally may enjoy those facilities for at once divining the needs of foreign customers, and for studying the industrial and commercial conditions of foreign countries in foreign newspapers, books and reports, which are increasingly indispensable for success in modern trade.

The growing stress of the competitive struggle is forcing merchants to shake themselves free from a good deal of old routine. They have to put more brain than heretofore into certain parts of the business of distribution, which, under older conditions, could be left more or less to the chapter of accidents or to the discretion of distant agents. The manufacturer for export (or the merchant who virtually directs him by explicit orders) has to picture to himself more vividly than before the actual conditions under which his goods will be offered for sale in each of a number of distant countries. He has to think out

* Foreign Office, 1897, Miscellaneous Series, No. 434. Report on Subjects of General and Commercial Interest. Report on the Association for the Promotion of Foreign Commercial Relations in Stettin. (C. 8649—5. 1d.)

beforehand the point-of-view of the remote customers whom he wishes to attract. He has to project himself in imagination into a number of far-off markets and to adjust his plans to their whims and traditional prejudices. He has to pack his goods as his customers are likely to prefer them packed. He has to design his goods and his advertisements so as to appeal to their fancies. He needs, for commercial purposes, that faculty of imagination by which, as Adam Smith said, "We place ourselves in another man's situation, enter as it were into his body and become in a measure him, and thence form some idea of his sensations and even feel something which, though weaker in degree, is not altogether unlike them." In other words, the successful exporter to distant markets needs a realistic imagination. At school, therefore, his imagination should be stimulated and trained, not, however, by attempts to make him prematurely realise commercial conditions, but by the searching and appropriate discipline of a liberal education. The latter, if it is rightly administered, will give him precision of thought, accuracy of observation and exactness in expression without at the same time inducing inertness or insensibility of imagination. The power of putting yourself at another person's point of view is as capable of development by skilful training as is the power of casting figures or of handling a cricket bat. A boy who has been taught at school vividly to realise the actual circumstances of the siege of Syracuse or of the struggle of the Puritan Revolution, will find himself in after life more able to picture to himself the actual conditions of distant markets in China or on the Congo than if he had been brought up on the meagre fare of shorthand and mere cram-books of commercial geography. The longer way round is often the shortest in the end. What he needs to learn is the habit of taking the necessary trouble to acquire the exact knowledge of remote conditions upon which his imagination has to play. While fortifying his powers of imagination on the one hand, we have to drill him into the habit of steadying his imagination by the necessary ballast of laboriously acquired facts. This is what he will get by the best kind of training at a good secondary school. And then, when the proper time comes, he will be able to avail himself of opportunities for acquiring precise knowledge of the particular conditions of the foreign markets under which his various ventures will be carried on. But it will be necessary for him to go on acquiring and deepening this knowledge all through his commercial life. Hence he will need the intellectual habit of finding out things for himself, of quickly grasping opportunities for extending his knowledge, of using books of reference and travel not mechanically and lethargically, but with ready power of applied imagination. And, in order to do this, he will require the trained faculty of learning new languages, at any rate up to the point which will give him access to the necessary literature.

Thus, the true foundation for commercial instruction is to be laid in the efficient secondary school, but experience is showing, more clearly every day, that if the modern secondary school is to turn

out the right kind of material for the higher ranks of modern business life, it must give a good *general* education, and not be driven or tempted into the fallacy of premature specialisation in subjects which a boy may indeed "cram up" (an industrious boy can be got to "cram up" anything), but which are unsuitable for his age, and themselves crowd out other and more appropriate forms of intellectual discipline.

This may be the best place to report on what I heard in Antwerp about the characteristics of some of the foreign students who have attended the Institute. The Belgians are all necessarily good linguists. The geographical position of their country compels them to be so, and the excellent instruction in modern languages given by the Belgian secondary schools greatly develops their linguistic aptitude. The Russian students at Antwerp are some of them very poor, but very industrious. They often earn a few francs a day by retailing the substance of the early lectures to students who are themselves too lazy to get up in time to hear them. It may be explained, in passing, that the first lesson always begins at 8 o'clock in the morning. The Germans, though not always clever, are invariably eager and keen. "If I look round my class," a professor said to me, "and mark the most industrious face, it is nearly always the face of a German." The Belgians and Germans are very keen about commercial advancement, and have thrown themselves into commercial life with the keenness and enthusiasm which lead to success in any branch of study. Of late years, there has only been one English "*regular*" student at the Institute. He went through the first year and did very well. But, during the summer vacation between his first and second year of study, an insurance office in Manchester offered him a post, which he accepted, and thus he never completed his full course at the Institute.

III.

The Institut Supérieur de Commerce at Antwerp is under the direct supervision, not of the Belgian Education Department, but of the Board of Trade. It has not always been so. Owing to successive changes in the organisation of the Belgian Departments of State, the Institute has passed under the charge of various offices, but it has now settled definitely under that of the Minister of Commerce and Industry, just as the Higher Agricultural Schools are under the supervision of the Department of Agriculture. I found on all hands an agreement that this is the best plan. It is said to bring the Institute into close connection with practical men of business. The primary object of the Institute is technical, not in the stricter sense educational. Its severance from the Education Department is said, by those who have given special thought to the matter, to have guaranteed to the Institute a healthy intimacy with commercial, as distinguished from purely educational, interests. There is a general desire to prevent its work from becoming mixed up or confused with the work of Evening Continuation Schools, or of Secondary Education. This separation is held to be for the good of both sides. The Institute is

doing work of a kind which requires *fresh* and very special knowledge of commercial needs and of commercial life. Once cut off from the tendencies of commercial circles, it might (it is said) get into a sort of educational backwater. Its life and growing success depend on the support, the confidence, and the continuous criticism of men actively engaged in commerce. The interest taken in education in Belgium is so widespread that the methods of instruction adopted in the Institute are naturally based on the best principles of educational science. The professors are trusted, being experts at the work. The inspection is wise and fair. The inspectors do not interfere in the purely educational side of the Institute's work. The Ministry takes counsel from experts as to the plans of study, and is careful not to prescribe what is educationally impossible. Thus the care for the educational interests of the Institute is secured, and what remains—the care, namely, for its efficiency according to commercial standards, is (it is held) best left to the Ministry whose first care is commerce. It is interesting to note that a similar view is taken in France, where the Schools of Commerce, including the École des Hautes Études Commerciales at Paris, and the Écoles Supérieures de Commerce at Harve and elsewhere, are under the supervision, not of the Education Department, but of the Ministry of Commerce and Industry. The same tendency may be noted in the different States of Germany, where the lower grades of technical schools are not under the care of the Education Departments, but of the Ministers of Trade and Industry. It should be added that, in the latter case, the friends of Technical Education think that the Intermediate and Lower Technical Institutes get more funds from the State under the present arrangement than they would if they were massed with all other kinds of instruction under the Education Department.* It will be noted, however, that this arrangement implies for its success, and for the avoidance alike of waste of money and of conflict of purpose, close concert between the different Departments concerned, and the existence, among the public at large, of a high standard of enlightenment as to the principles of educational administration. It is because German manufacturers, for example, are themselves well informed as to the aims and work of the secondary schools and thoroughly convinced by personal experience of the value of a liberal secondary education, that they cordially support the authorities of the Higher Technical Institutes in requiring, as a necessary condition for entrance, the leaving certificate from a first-rate secondary school. Were there any distrust, on the part of merchants or manufacturers, of the value of a liberal secondary education, the effect of giving them influence over the course of professional training might be the framing of regulations which would indirectly induce premature speculation in the schools which form the avenue to the institutes for higher technical and professional studies.

* The Technical High Schools (Polytechnics) are under the Education Department, but it may be noted that the new Commercial Higher School at Leipzig has been placed under the control of the Home Office.

The Director of the Institute, Dr. Grandgaignage, who courteously gave me much valuable information, extracted for me the following statistics from his records:—

Year.	Total Number of Students in the Institute.	Of these were (*a*) Belgians.	(*b*) of foreign nationality.
1895 -	219	142	77
1897 -	247	166	81

The entrance lists for the session, which at the time of my visit had but recently begun, were not yet complete. The total number of students in the Institute had risen to 255, of whom 22 were in their third year. Of the residue, 143 were Belgians, and 90 of foreign birth.

It may be of interest if I describe some of the lectures which I was permitted to hear. They were still being given in the old buildings in the Rue de Chêne, centrally situated but quite inadequate to the present importance of the work of the Institution. By the time, however, that these words are printed, the Institute will have moved into the palatial building recently erected for it by the Municipality—an edifice in every way well planned for the work, and marking by the dignity of its elevation the high place which the Institute enjoys in the public life of Antwerp.* The first lecture in the morning was given by Professor William Layton, the Professor of English, of whose kind assistance to me in this inquiry, both at the time of my visit and afterwards, I desire here to make fitting acknowledgment. Sixty-eight students were present at the lecture. About ten minutes after it began, a répétiteur came round and marked the attendances. The professor began in French. He said he would read a passage from the commercial intelligence in an English newspaper. Producing a cutting from the *Times*, he read aloud that "a large contract, for the supply of 20,000 tons of best colliery-screened Monmouthshire steam coal had recently been placed at ——— and that great interest had been excited in the trade at the size of the order." He proceeded to read the market quotations for different kinds of coal. A student was then called upon to translate into French the dictated passage, which had been taken down in English. The whole lesson, which formed part of the first year's course, was an admirable disquisition on the meaning of a large number of technical terms used in English trade, and on their equivalents in French. After thoroughly working through such a course, a young Belgian or German would

* The plans of the new building can be seen at the Education Department Library. They include a large lecture theatre, numerous class rooms, a museum of products, and a Director's house.

have much less difficulty in understanding the commercial intelligence in an English newspaper than if he had to rely on the best of dictionaries.

The next lecture was on Civil Law. The professor began by slowly dictating some notes, which were taken down by the whole class—about 89 in number. He then broke out into an animated and interesting address, listened to with much attention by the students, on the Belgian law of domicile, on the position of aliens in Belgium, on naturalisation, and on the right of expelling strangers who were suspected of fomenting civil disturbance. The students were diligent in taking notes. They looked mostly of about 18 to 20 years of age, some older. Here and there was a young fellow in military uniform. On this point I may say that the law of military service has no such influence on the number attending the Antwerp Institute, as I was informed in Paris was the case in the French Écoles Supérieures de Commerce. In France, a young man who gains the diploma of a recognised École Supérieure de Commerce is now excused two out of three years of compulsory military service.* And I was told by many competent observers in Paris that this new privilege has had a great deal to do with the increased popularity of the French higher schools of commerce. But this is not the case in Antwerp. In Belgium, it is true, all young men are nominally required to serve in the army, but in point of fact only about one in eleven draws an unlucky number in the ballot. A parent can indeed insure against his son's drawing an unlucky number by pledging a sum of £64 (1,600 francs). Those few students at the Institute who are actually attending its courses of instruction during their period of military service are virtually exempted by the Government from the more arduous part of their military duties. They have, it is true, to answer to their name at roll call in barracks once a day, to wear uniform and to take part in the autumn manœuvres. But otherwise they are excused real service with the colours. And if a private in the army, after thus serving and studying at the same time, comes out high in the final examination, he may look with some confidence to getting a good place from the Government. For example, a young man who recently studied at the Institute under these conditions has been given by the Government a consular appointment in Japan. But, though the terms of military service are thus mitigated in the case of those students who have drawn an unlucky number in the ballot, these alleviations do not, as a matter of fact, count for much in increasing the number of Belgian students at the Antwerp School. Foreign students, however, from Russia and Italy, who succeed in winning the diploma, are exempted by their Governments from some part of their military service.

The most important branch of the course of instruction given at the Institut Supérieur de Commerce at Antwerp is that which is known as the Bureau Commercial. On this branch converge the various courses

* The Décret du 22 Juillet, 1890, extends to recognised Écoles Supérieure de Commerce in France the privileges granted under Article 23 of the Loi sur le recrutement de l'Armée of July 15, 1889, as further specified by the Decret du 31 Mai, 1890.

of theoretical teaching. It aims at introducing the student, in a systematic course of two years, to all the usual incidents encountered in the course of foreign trade. It is practical from first to last. This does not mean that the Institute attempts to reproduce what one may call the stage properties of commercial life. There are no rooms elaborately furnished like the office of a commercial house—no facsimiles of the furniture and equipment of a merchant's office. In Paris, indeed, there is a "Business College," as the Americans would call it, which does make in its advertisements a great show of these accessories. But this is not one of the Higher Commercial Schools to which this paper refers. I found that the graver supporters of commercial education were more than a little inclined to doubt whether it is prudent to attempt to combine even the appearance of such realistic methods with serious and systematic instruction. It is said that the idea of doing so came from America, and it is of such an American school of commerce that R. L. Stevenson and Mr. Lloyd Osbourne made their amusing travesty in the first chapter of the *Wrecker*. But nothing of this kind finds a place in the Institute at Antwerp. The work done in the Bureau is hard and systematic, and has nothing in it approaching to educational theatricals. And yet, in a true sense, it is what the Germans call "Anschauungs-Unterricht," vivid, real, based on the things of life. It aims at presenting the whole of a representative variety of international business transactions from their start to their finish. And the matter so far as it refers to different countries is discussed and dealt with in the language of those countries. This does not mean that merely a succession of commercial transactions are taken in turn and explained to the students. The course is carefully graduated, and the principles of commercial arithmetic, of calculation, of insurance and of law are explained systematically in orderly sequence, so that the students get a grasp both of the theory and practice of foreign trade. A number of different courses by different teachers are brought into concentration on this point. The lectures on the history of commercial products; those on commercial history and geography; those on economics, on law, on tariffs, and to some extent the classes in foreign languages are in large measure brought into focus on this course as the pivot round which the whole scheme of study turns. The details of the course will be found in the Appendix. Here it must suffice to say that the students are first familiarised, by an exacting discipline, with the more difficult branches of applied commercial arithmetic. These initial difficulties mastered, the pupils are given a carefully graded series of problems so designed as to illustrate the normal operations of a firm engaged in extensive foreign trade. It is at this point—in the selection of what Monsieur Eugène Léautey, in his admirable book on Commercial Education, calls "les operations de commerce fictif"—that the heaviest demand is made upon the good sense and educational skill of the teachers. Of these details of their work I am not myself able or competent to speak, but I can only report that others, possessing the necessary knowledge and authority, have passed high commendations on the way in which this difficult task has been fulfilled.

At the time of my visit to the "Bureau of the first year," the course

was still near to its beginning. The class met in a large room, plainly furnished with office desks. Of 50 students enrolled for this class, 43 were present. Each year's batch of students is divided into two halves for the Bureau. The one I visited was confined to Belgians, the foreign students being taught in a parallel division where there was more dictation. The problem was concerned with a purchase of San Domingo coffee, the purchase being supposed to have been made in New York. It involved a number of complicated factors—commission, insurance, freight, etc. Other problems followed. After a few words of lucid explanation, the students were set to work out the calculation for themselves. Subsequently, the professor gave an admirable analysis of the problem in clear and logical language, the students following him with the closest attention. They did the work in pairs, but this is not permitted in the actual examinations. The professor kindly showed me one of the note-books of one of the students in the second year. I was struck by the range of work which it covered. The aim of his first year's teaching, he told me, is to compel the young men to reckon in an exact, rapid, and practical manner. In the later part of the course, the simulated operations become more complex and difficult. Each of these lessons in the Bureau lasts for two hours, and evidently calls for hard work on the part of the students. I subsequently heard a lesson on commercial products given to the second-year students of the "Bureau." It was on jute—a careful lesson fully illustrated by specimens and diagrams.

The teaching is not all done in the class rooms. The visits paid by the students to docks and factories, under the guidance of the professors, and with other expert assistance, are said to be very useful. These visits are not confined to Antwerp, but embrace a number of the important centres of Belgian industry. Exhibitions are also used for an educational purpose, and no one who has visited the more important recent exhibitions in Germany and elsewhere can fail to have been struck by the way in which their admirably classified contents lend themselves to this kind of use.

It will be seen by a glance at the curriculum of the Institute, printed in the Appendix to this paper, that the course of study comprises a great number of different subjects. On this point, I gathered in conversation with some of the students that some dissatisfaction exists. Those with whom I talked considered that there were too many subjects in each year's work. The force of the criticism is admitted by some of the professors. It is possible that the addition of a third year to the course of study may enable the authorities to relieve in some measure the congestion of the curriculum.

IV.

It may be asked from what ranks in Belgian society are the students of the Institute chiefly drawn? Do the great merchants favour the scheme and send their own sons to receive the advantages offered by its instruction? In a letter to the *Times* of March 14, 1898, Sir Bernhard Samuelson, who speaks with the highest authority on matters of commercial education, asked, "Who are the Belgian merchants of

repute in the commerce of the world, and the manufacturers of Belgium who have received their education at the Institut Supérieur de Commerce at Antwerp, which has now been established for many years?" These pertinent questions raise issues which will be discussed at greater length in a later part of this memorandum, but it may be convenient here to mention some facts which bear upon the point.

The Institute was founded in 1852. It has, therefore, been in existence nearly forty-six years. Indirectly, it owed its origin to the Hyde Park Exhibition of 1851. Four years previously, the then Foreign Minister of Belgium, Monsieur Dechamps, had laid before the Municipality of Antwerp and the Provincial Council a scheme for a Higher Institute of Commerce, and an Antwerp merchant had simultaneously published a pamphlet, entitled "Projet d'organisation d'une université belge de commerce et d'industrie."* But difficulties arose which frustrated the carrying out of these plans. In 1851, however, Monsieur Rogier, then Belgian Minister for the Interior, revived the scheme. He had been impressed by the commercial activity of England, as displayed in the Great Exhibition and by the new world of industrial effort which he saw presaged there. He felt that more could be done to promote Belgian trade, "if only Belgium had competent men to represent her in foreign markets."† M. Rogier's plan was quickly taken up, and the Institute founded. For a long time the number of students taking the full course was small. Beginning with 10 in 1853-4, it stood at 35 ten years later, while in 1873-4 it had only increased to 50. After another decade, it had risen to 78, and now stands at about 300. The number of students taking only special courses was for a time much larger than those entering for the full curriculum. Now, however, these "occasional" students form the minority. From the first there have been a considerable number of foreign students at the Institute. It is believed by many that this would also be the case in London if a similar institution were established here.

For a period, it is clear, the Antwerp Institute suffered the natural penalty of being a little before its time. It was, in a sense, a prophetic idea. The commercial world was hardly ready for it. The conditions which were to ensure it success had not been fully developed at the time of its establishment. As in other schemes of technical training, the pioneers had for a long time to be patient with apparently small results. I hardly think, therefore, that we can reasonably expect the Institute to have had a large part in the training of the generation of merchants now enjoying the highest places in the trade of Antwerp. Another twenty years must pass before any definitive judgment can be passed on the influence of the Institute upon Antwerp or Belgian foreign trade. It is possible that, if the organisation of the Institute embraced one or more Halls of Residence, where students might enjoy the disciplinary and other advantages of collegiate life, some parents might be more willing to avail themselves of its opportunities in the education of their sons. But a certain number of the best commercial

* Cp. "Commercial Education in Belgium," by Prof. W. Layton, p. 6.
† Léautey, *L'enseignement commercial*, p. 581.

families do, I am told, send their sons to the Institute. Two members of the present Belgian Ministry have thus shown their confidence in its work. At the same time, it is freely admitted that some leading Belgian merchants do not believe that such a training as the Institute affords is the best preparation for business. There, as here, expert opinion is divided. Perhaps it will be fair to say that, while there is no general agreement on the subject, an increasing number of Belgian merchants are becoming convinced both of the value and necessity of special preparation of this kind for the higher branches of foreign trade; and the fact that the Antwerp Institute enjoys the full confidence of the Municipality and of the Belgian Government is proved by the large subsidies which both are making in furtherance of its work.

Perhaps the most striking illustration of the growing influence of the Institute in commercial circles in Belgium is the growth and success of the "Cercle des Anciens Étudiants de l'Institut Supérieur de Commerce." This association of former students was established in May, 1873. Its aims are to promote friendly relations between the men who have been trained at the Institute, to encourage commercial enterprise, to stimulate a taste for commercial life, to study commercial questions, to establish scholarships tenable at the Institute, and to maintain the privileges which have been or should be accorded to the holders of its diploma. In 1876 the Government granted the degree of "Licencié en Sciences Commerciales" as a title attached to the diploma, and its later decision (in 1893) to reorganise the consular service in the interests of Belgian trade was regarded as, in part, the outcome of the persistent efforts of the Association.* The Cercle numbered 390 members in 1893-4. It has published a long series of reports on various commercial subjects, among which may be mentioned the following:—

Le Commerce des États Unis.

Quelques Mots sur la Question des Sucres.

Le Pétrole du Caucase.

Droits d'Entrée sur les Denrées Alimentaires.

De l'Instruction Commerciale.

La Politique Coloniale.

Le Partage de l'Afrique.

The most recent effort of the Association has been the organisation of an International Congress on Commercial Education, which was held at Antwerp in Easter week, 1898.†

One other point ought to be alluded to in this connection. Belgium, as is well known, is unhappily divided by religious differences. And, though theological matters do not enter into the curriculum of the

* Cercle des Anciens Etudiants de l'Institut Supérieur de Commerce d'Anvers. Sa fondation et son développement jusq'en 1894. (Antwerp, Theunis, 1894.)

† A report of the proceedings of the Antwerp Congress will be found in the *London Technical Education Gazette* (P. S. King, 9, Bridge Street, Westminster), for May, 1898 (pp. 60-66). The full official report of the Congress has since been published (Theunis, 28, Rue du Lombard, Antwerp).

Institute, nevertheless there is a strong tendency among Catholic parents to prefer to send their sons to places of education which are under distinctly Catholic influence.

This leads me to say a few words on the subject of discipline. The regulations of the Institute follow the ordinary model of a foreign university. The students, when outside the premises of the Institute, are under no disciplinary supervision. There is no residential college, but one or two of the professors take boarders into their houses. Students are not admitted to the examinations unless they produce a certificate from the principal teacher of the "Bureau" to the effect that they have worked through at least four of the principal subjects of the curriculum. Breaches of internal discipline would be punished by the withdrawal of leave to attend lectures, or, in extreme cases, by expulsion from the Institute.

In this, as in every department of its work, the Institute gains much from being on a public basis. It can take its own line in difficulties, and is under no constraint to conciliate individual whims and fancies. The plan of studies is approved by the Government. In educational matters full freedom is given to the teaching staff. The professors can aim at what is educationally best, and are not hampered by any anxiety as to numbers, as would be the case if they were "paid by results." Government inspection and the *esprit de corps* of a great institution secure efficiency, and furnish the guarantees for which the public and the parents have the right to ask. I was assured by those on the spot that it would have been impossible for the Institute to have won its present position on any other terms.

The professors have not themselves actually been in business, but they have one and all strong business interests, and are practical men. They live in a commercial atmosphere, in a great commercial centre. This, the director urged upon me, is essential to the success of such an institution. It must be in the middle of things, otherwise it would become "academic," and detached from the facts of commercial life. It by no means follows that a man actually or recently engaged in business would give the best commercial instruction. In manual training (to quote a parallel case), it is by no means the case that a working carpenter best teaches a class of boys to do woodwork. What is essentially necessary in both cases is the *teaching gift*, to which (in the case of the commercial teacher) must be superadded strong business interest, a wide range of knowledge, and a systematic study of commercial methods. In fact, one of the great services which a Higher School of Commerce might render to a community is the training of teachers of commercial subjects for day and evening classes in polytechnics and commercial schools.

V.

It is characteristic of Germany that this function of training teachers of commercial subjects has been put into the forefront in many of the memoranda which have recently appeared in that country in favour of the establishment of Higher Schools of Commerce. Strictly speak-

ing, until the present year there has not existed in any part of Germany an institution with aims precisely analogous to those of the Institut Supérieur de Commerce at Antwerp. There is, indeed, an abundance of commercial evening continuation schools, and commercial classes of excellent quality. Municipalities and commercial societies of various kinds have been forward in providing young clerks and others with opportunities for acquiring commercial knowledge, and other aptitudes of value in business life. Such classes, for example, as those arranged in Hamburg by the "Verein für Handlungskommis von 1858," or in the Handelslehranstalt, at Leipzig, by the Municipality of that city, are typical of a great number of similar efforts which have been made all over Germany, not always on a similar scale, but, nevertheless, on the same kind of basis and with similar objects in view. A good account of all these will be found in a work on commercial continuation schools by Dr. Stegemann, Syndic of the Chamber of Commerce for the Duchy of Brunswick.*

Moreover, Germany has a system of non-classical secondary schools, which, in point of laying a suitable foundation of general knowledge for those intending to devote themselves to business life, is probably without a rival in the world. No other nation has so systematically built up its fabric of intermediate day schools. The process has been a long one; its directors have been satisfied with nothing short of a very high level of intellectual attainment; and the commercial results of this widely diffused liberal education are only just beginning to show themselves. Non-classical education in Germany has made great strides during the last ten or fifteen years. The young men who have had the advantage of such a training are only just beginning to come to the front in the business world.

Prussia alone is turning out youths thus trained at the rate of thousands a year.† The ultimate effects of this process will doubtless be considerable. His inquiries have convinced the present writer that the world has only begun to taste the effects of the *first-rate* non-classical secondary education now given all over industrial Germany. The commercial advance of the German Empire, so striking to any visitor to that country, is due to a combination of causes. But one of these causes is the extreme intellectual efficiency of the secondary schools and of the Higher Technical Institutes. The Germans do not mix up these two grades of educational work. The secondary school is organised as the foundation, the higher Technical Institute as the crown. It is to the non-technical secondary schools and to the highly

* Kaufmännisches Fortbildungs-schulwesen. II., Der gegenwärtige Stand. von Dr. Stegemann. (Braunschweig, Albert Limbach, 1896.)

† Cp. articles on "The Realschulen of Berlin, and their bearing on modern Secondary and Commercial Education," and on "The Oberrealschulen of Prussia," in the volume of "Special Reports on Educational Subjects, 1896-97"; and the articles on "Problems in Prussian Secondary Education," on "Modern Language Teaching in Germany," "Curricula and Programmes of Work for the Higher Schools in Prussia," "The Teaching of Foreign Languages," "The Teaching of Modern Languages in Frankfort," "The Training of Modern Language Teachers in Germany," and "The Higher Schools of the Grand Duchy of Baden," in the present volume.

specialised Technical Institutes, far more than to the elementary schools or evening continuation schools, that those should look who desire to trace the *educational* causes of the commercial progress of the German Empire.

German non-classical secondary education prepares a boy to excel in commercial life, but it is not commercial education in any narrow sense. Indeed, the German secondary school authorities rigidly abstain on principle from any attempt at premature specialisation in commercial subjects. Nor are the commercial evening continuation schools, admirably conducted though they be, aiming at the objects of an Institut Supérieur de Commerce. And consequently there has arisen during the last few years in business circles in Germany a strong movement in favour of establishing what is called a Handelshochschule, or Higher School of Commerce.*

In this movement, as in our own country, the Chambers of Commerce have taken a leading part. Just as the London Chamber of Commerce has for many years shown a lively interest in the problem of increasing facilities for commercial education, so has the Brunswick Chamber of Commerce specially distinguished itself by the labour it has given to collecting the necessary information. In this the Leipzig Chamber of Commerce has not been behind, and it is in Leipzig that the first German Higher School of Commerce has been established in the present year.

The Director of the Municipal School of Commerce at Leipzig, Professor Dr. Raydt, has taken a leading part in the new movement. In an article which has recently been published,† he draws a clear distinction between the three separate types of commercial education—(1) evening classes, (2) commercial schools of the second grade (*i.e.*, doing work of the same level as that done in the evening classes, but provided in the day-time with courses more systematically grouped), and (3) the Higher Schools of Commerce. His long experience of work of the first two types has convinced him that there is need for an institution of the third type also. The danger is lest schools of the second grade should attempt to provide, or pretend to offer, the advantages of an Institut Supérieur de Commerce. Dr. Raydt evidently believes such a confusion of functions to be undesirable. If a Higher School of Commerce is worth having at all, it ought to be of academic rank, equipped like a sort of university college and staffed by men of high intellectual attainment and position. In order that this may be secured, a Higher School of Commerce ought, in Dr. Raydt's judgment, to be organised in the same kind of way as one of the famous Technical High Schools,

* The growth of the movement has been recorded, month by month, in the *Hochschul-Nachrichten* (Akademischer Verlag, Maximilianstrasse, 20 B, Munich). There is now an excellent German magazine devoted to questions of commercial education. It is called the "Zeitschrift für das gesammte Kaufmännische Unterrichtswesen." (Brunswick, Albert Limbach.)

† "Die erste deutsche Handels-hochschule zu Leipzig." Professor Dr. Raydt has since published a little Denkschrift, entitled "Die Handelshochschule zu Leipzig, die erste in Deutschland." (Leipzig, Max Hesse's Verlag.) Both of these can be seen at the Library of the Education Department. An interesting paper on this Leipzig Institute, by Mr. Laurie Magnus, was read by Sir P. Magnus at the Guildhall Conference in July, held since this report was written.

which have done so much for German industry.* Whether or not such a Higher Commercial Institute should be made an *organic* part of a University is another and very difficult question. The Leipzig University authorities answered the question in the negative. But there is to be close correlation of effort between the Leipzig Handelshochschule and the University of Leipzig. Three of the University Professors have seats on the Senate of the Handelshochschule.

Dr. Raydt defines the object of the Handels-hochschule to be the raising of the position of the trading classes in social estimation, and their equipment with the higher level of expert knowledge which the conditions of modern industry require. In regard to the first point, it will be remembered that in Germany more social prestige attaches than is the case in this country to the status of highly educated men. German society is more clearly divided than our own by lines of higher education. It is the second point, however, in Dr. Raydt's definition which is of the deeper and more general significance. As international competition becomes more tense; as old-established positions in foreign trade become less secure; as, at every point, economy combined with suitable quality in production becomes more necessary; so is it felt that there is a growing need for the combination of business enterprise, capital and *wide knowledge* in many forms of commercial undertaking, where in former days energy, wealth, and a more limited experience were found to suffice. International trade is becoming more complex; more factors have to be taken into account; the margin of profit becomes smaller; the need for accurate prevision more urgent; in a word, the foreign merchant has to know more, to be alive to a wider range of issues, to be more familiar with the *intellectual* aspects of his calling. And it is to fit the foreign merchant of the future with these necessary qualifications that the Higher Schools of Commerce are being called into existence on the Continent.

The Leipzig scheme was discussed and criticised with the thoroughness which marks all educational undertakings in Germany. In June, 1897, a congress was held of the German Association for Promoting Commercial Education. Dr. Raydt undertook to prepare a scheme for a Higher School of Commerce. The committee of the Leipzig Handels-Lehranstalt took his proposals into close consideration. The Rector of the University of Leipzig, and several of the University professors, were consulted. Finally it was agreed that the new Higher School of Commerce should not be made an organic part of the University itself, but should be an independent institution, established by the Leipzig Chamber of Commerce, with the co-operation of the University and of the existing Handels-Lehranstalt. The German Association for promoting commercial education examined and improved the scheme at two meetings held at Eisenach and Hanover. The President of the

* An important factor is the scale of salaries to be paid to the professors. At Antwerp one of the professors enjoys an income of £800 a year. If the differences in the social claims made on professional men in the two countries are compared, I understand that a salary of £400 a year in Belgium equals a salary of £600 a year in England. The income, therefore, of the professor referred to above is equivalent to £1,200 a year. The professors at Antwerp, being civil servants, have also pension rights.

Publishers' Association of Leipzig, as representing the vast publishing interests of the city, was also consulted by the promoters of the plan, and finally the organisation of the new Higher School of Commerce was satisfactorily settled.

It will provide a course extending over two years. The following classes of students will be admissible:—

(*a*) Those who have passed the leaving examination held at the completion of the *nine years'* course of study in German classical, semi-classical, and non-classical secondary schools (Gymnasien, Real-gymnasien, and Oberrealschulen).

(*b*) Persons engaged in trade who have completed with success a *six years'* course in a German classical, semi-classical, or non-classical secondary school (Progymnasien, Realprogymnasien, and Realschulen), and have obtained the certificate for one year's military service as a volunteer.*

(*c*) Students from German training colleges for elementary school teachers, who have passed the second professional examination for teachers in elementary schools.

(*d*) Foreigners who show evidence of possessing the required standard of previous education and are over twenty years of age.

Persons will also be admitted to attend occasional courses of lectures, and this privilege will be specially extended to undergraduates at the University of Leipzig and to men already engaged in business life.

The proposed course of study is, in many respects, similar to that of the Antwerp Institut Supérieur de Commerce.† It naturally includes a number of subjects specially interesting to German students—*e.g.*, the Law and Practice of the Insurance of Workmen. In accordance with German academic custom, there will be a Seminar, in which students will have an opportunity of doing more advanced work under the direct supervision of the professors in charge. The Seminar will confer a special diploma.

The Leipzig Handelshochschule is under the direction of a council of twelve members. One of these represents the Saxon Government, one the City of Leipzig, three the Leipzig Chamber of Commerce, three are professors of the University of Leipzig, three are chosen from the staff of the existing Handels-Lehranstalt, and the twelfth member is a Director of Studies co-opted by the other members of the Council. The Council will elect a president of the Handelshochschule for a term of three years, the ratification of the Government being required for their choice. The financial responsibility for the Higher School have been undertaken by the Leipzig Chamber of Commerce. The Director of Studies will act in close co-operation

* For the educational significance of these technical terms the reader is referred to an article on "Problems of Prussian Secondary Education for Boys" in the present volume.

† For the regulations of the new Handelshochschule at Leipzig, see Appendix VI.

with the professors of the university, in order that there may be no overlapping of educational effort.

On January 14 of the present year (1898), the Home Office of the Kingdom of Saxony signified its approval of the scheme.* The document announcing this decision is of some importance, as being the first official memorandum in which one of the German Governments has approved a plan for the establishment of a Higher School of Commerce. It provides an annual subsidy of £250 in aid of the work of the new institution. It promises to establish at a later date a Government examination in commercial subjects, when the first six months' experience has shown how best such an examination should be framed. Thus the educational work of the Handelshochschule will be under the highest guarantees of efficiency. The institution will be on a public basis and under the continuous supervision of the State.

The Saxon Government draws the attention of the promoters of the new undertaking to three other points. First, the vacations must be curtailed within reasonable limits; secondly, the discipline of the students must be carefully watched; and, thirdly, efforts must be made to prevent the establishment at the present time of a number of competing Higher Schools of Commerce in other parts of the German Empire. So widespread is the zeal of business men in Germany to secure the educational advantages of these institutions that plans are on foot for the establishment of Handelshochschulen in Aachen, Hanover, Dresden, and Frankfurt-am-Main. The Aachen project is already certain to be realised. But the Saxon Government expresses the hope that the other schemes may be deferred for the present at all events, and relies on the influence of the Leipzig Chamber of Commerce being directed to secure this end.

Commercial opinion in Germany, however, is not unanimous in favour of the establishment of schools of commerce. There are some rather bitter sentences on the subject in the annual report of the Hamburg Chamber of Commerce for 1897 (Jahresbericht der Handelskammer zu Hamburg über das Jahr 1897. Hamburg. Ackermann und Wulff): "The science of business is a science which must be learned by practical experience. It cannot be picked up on the benches of a classroom. It must be acquired in practical life. A young man trained in a School of Commerce will enter on practical life with his head full of all manner of preconceptions. But, in spite of all his theoretical knowledge, he will have to begin again from the beginning when he enters practical life. The precious time spent by him at the School of Commerce will be largely wasted, and often there will be nothing but his academic tricks of style to remind himself and his associates that he once studied the science of commercial life." There is a good-tempered reply to this in the *Zeitschrift für das gesammte Kaufmännische Unterrichtswesen* for June 1898.

VI.

Of the French Higher Schools of Commerce it is unnecessary to say

* "Verordnung des Königlichen Ministeriums des Innern zu Dresden, die Begründung einer Handelshochschule betreffend, vom. 14, Januar, 1898."

much in the present paper, as a full account of the École des Hautes Études Commerciales at Paris has been already published in the volume entitled "Commercial Instruction organised by the Paris Chamber of Commerce," which was prepared by that Chamber for the Chicago World's Fair of 1893.* Moreover, at the International Congress on Technical Education, held in London in the summer of 1897, an admirable report on Higher Commercial Education in France was read by Monsieur Jacques Siegfried, to whom this branch of French education is under a heavy debt.†

There are in France at the present time eleven Higher Schools of Commerce recognised by the State. The Director of Technical Instruction in the French Ministry for Commerce and Industry has kindly favoured me with the following statistics showing the number of students, in the first and second years respectively, in nine of these schools in 1896-7.

ÉCOLES SUPÉRIEURES DE COMMERCE.
Number of Students at the end of the School Year 1896-7.

Name of Institution.	Students of the 1st Year.	Students of the 2nd Year.	Total.
École des Hautes Études Commerciales, Paris	118	128	246
École Supérieure de Commerce, Paris	63	43	106
Institut Commercial de Paris	48	31	79
École Supérieure de Commerce, Bordeaux	60	55	115
École Supérieure de Commerce, Le Havre	40	43	83
École Supérieure de Commerce, Lille	45	51	96
École Supérieure de Commerce, Lyon	78	82	160
École Supérieure de Commerce, Marseille	67	57	124
École Supérieure de Commerce, Rouen	33	—	33
TOTAL	—	—	1,042

The Higher School of Commerce at Rouen has now got students in the second year. In 1897 two new Higher Schools of Commerce were

* This book can be seen at the Education Department Library. It contains translations of all the regulations and of the courses of study.
† Printed in the *Journal of the Society of Arts*, July 30, 1897.

opened—viz., at Montpellier and Nancy—making eleven in all, recognised by the State.

The direct Government subsidy towards the maintenance of these schools amounted in 1896 only to £400 (10,000 francs). In former years the grant was larger. In the present year (1897-8) the Government grant for maintenance will cease altogether. The remission of two years' military service, granted to those who obtain the diploma at recognised Higher Schools of Commerce, is regarded as a privilege sufficient to secure the attendance of the necessary number of students. And it is also the aim of the Government to stimulate the initiative of local Chambers of Commerce in a matter which is pre-eminently one of commercial interest.

But, on the other hand, the French Government makes an annual grant of £1,640 for travelling scholarships tenable for periods of two or three years by young men who have obtained the diploma at a recognised Higher School of Commerce. The regulations for the award of these (and other) commercial travelling scholarships are printed in the Appendix to this paper. All the Higher Schools of Commerce have a share in these travelling scholarships, except the schools at Montpellier, Nancy, and Rouen, in regard to which no decision had been reached by the Government in October, 1897. Doubtless, however, these schools will in due course share in the privilege.

The movement for higher commercial education is making rapid strides in France. It has the favour of the Government and the support of a large number of eminent merchants.*

In October, 1897, I had an opportunity, by permission of the French Government, of visiting the Écoles Supérieures de Commerce at Paris and at Havre. Unfortunately, at the time of my visit the courses of instruction had not yet begun, but I was allowed to see the buildings, which, in the case of the École des Hautes Études Commerciales, at Paris, are on a spacious scale. This institution comprises a residential section as well as provision for day students, and also a junior or preparatory department, which is entirely separated from the higher school itself. There is a fine museum of commercial products, an ample and beautiful library, a laboratory, two large lecture theatres, a number of lecture rooms, dining rooms, several recreation rooms, as well as the dormitories, sanatorium, etc., which belong to the Hall of Residence, as we should, perhaps, call it in England. All this admirable provision is due to the liberality of the Paris Chamber of Commerce, which has distinguished itself by its devotion to the cause of commercial education.

Two features in the French system of higher commercial education are peculiar, and seem to call for further inquiry. First, the remission

* Cp. the following passage in an address delivered at Nancy on October 20, 1897, by M. Boucher, Minister of Commerce:—Le ministre s'est ensuite félicité de l'augmentation des candidats aux écoles commerciales: "C'est là, déclare-t-il, de la part des familles, une perception bien nette du présent et de l'avenir. Que ceux qui peuvent croire qu'on vivra de la vie de rentier dans l'avenir renoncent à élever des enfants! Que ceux qui pensent que des appointements de fonctionnaire suffiront pour assurer une vie large voient mal l'avenir, eux aussi! Il faut habituer les enfants aux œuvres actives, aux luttes, car se sont eux qui devront lutter et sauver l'avenir de leurs propres enfants."—*Le Temps*, Octobre 21, 1897.

of two out of three years of military service is only granted to four-fifths of the students who succeed in gaining a minimum of 65 per cent. of the marks obtainable during the whole course of study. In other words, 20 per cent. of the students who come up to the required minimum, though they are now given the diploma, fail to get the naturally-coveted exemption from two years' military service.* It is understood that this regulation is designed as a sort of goad to stimulate the industry of the students.

Secondly, the visitor to the École des Hautes Études Commerciales in Paris is struck by the provision of a number of little chambers devoted to the process of frequent examinations upon the work done in the classes. But these recurrent examinations ("collections," as they would be called at Oxford, only at Paris they are held much more frequently than once a term) are conducted, not by the professors who teach in the classes, but by a special staff of "examinateurs." The staff thus comprises two distinct elements, the "professeurs" and the "examinateurs." The latter carry on a sort of continuous audit of the students' work. I was assured that the professors and these examiners worked in close concert, but I regretted that I had not further opportunity of ascertaining the educational effects of this rather anomalous system.

In Paris I became conscious of the existence of two very different currents of opinion, as to the value, for commercial purposes, of the Écoles Supérieures de Commerce. A friend, who is the active partner in one of the most famous publishing houses in Paris, spoke very frankly to me on the subject. And I may add that great weight attaches to his opinion, not only because he has proved himself to possess the business faculty in a pre-eminent degree, but because he has made a very careful study of the French and English systems of secondary and higher education. He gave it as his opinion that the success of the Écoles Supérieures de Commerce was mainly due to the regulation granting to a certain number of holders of their diplomas exemption from two out of three years of military service. "This is the root of the matter: it is not that parents really care about higher commercial education. The schools have no real influence on the higher walks of trade. Far better give a boy a first-rate secondary education and then let him travel. And such a secondary education must be liberal and wide. Mere specialisation in commercial subjects does harm instead of good. These higher schools of commerce may be first-rate in producing specialists. But what you want at the head of a business is a man of energy, of strong common-sense, of imagination, of knowledge of the world. The head of a business can hire a specialist. What is absolutely essential is that the chief of a commercial house should be a man of character, not simply crammed full of knowledge."

I think it right to report the substance of my friend's opinions, because it is well to hear both sides, especially when put with trenchant force. A few days later, at Havre, I talked over the same question with

* Until the change of regulations made in April, 1895, the unlucky fifth were deprived of the diploma as well.

Monsieur Dany, the distinguished Director of the École Supérieure de Commerce in that town. He admitted at once that many people thought the higher schools of commerce no good for trade. But he believed these critics to be wrong, and that the balance of commercial opinion was gradually turning against them. "You cannot" (I give the general substance of his remarks) "learn in an office all that you learn here. True, you cannot learn here what you learn in an office. Both are necessary; the two are complementary. In the office you learn office routine; here you learn general ideas. The wider your basis of general knowledge, the more quickly can you specialise afterwards with effect. If you go into an office too soon, you miss your chance of general education. There are, in point of fact, two distinct classes of business men. The first must begin their practical work in their 'teens. They cannot afford to wait. They miss their chance of systematic education. Except under fortunate circumstances, they will remain in subordinate posts all their lives. The other class are the sons of rich merchants, intended for their father's business. These can afford to wait. It is well for them to know a great deal about the general conditions of their calling before they actively enter upon it. Otherwise they will be more or less dependent on their own paid servants." The social position of trade, he continued, is rising in France. Formerly a successful merchant put his boy into a profession, or sent him into the Army. But now that a commercial career enjoys much higher consideration, wealthy parents are more and more putting their sons into their own business. And for success you need not only energy and character, not only trained brain-power, but a wide range of appropriate knowledge. And that, say the advocates of higher commercial education, you can get at a Higher School of Commerce. The retort of the opponents of this form of specialised educational institution is that a clever young man who has been well educated at a secondary school can get this wide range of appropriate commercial knowledge a great deal better by travel and by a period of service in a business house abroad. Perhaps, as Sir B. Samuelson has put it, the truth is that the choice of the parent ought to depend on the character and disposition of the young man.

I asked Monsieur Dany whether he found the boys from the "modern" sides of secondary schools better fitted for the work of the École Supérieure de Commerce than boys from the classical side. He said that it should be so, but was not always so as a matter of fact. He gets very promising pupils from the classical side. The reason is, he thought, that the cleverest boys were still to be found on the classical sides of secondary schools. But is this because the classical studies are best, or because the most intelligent boys still pursue them? The answer, he thought, was that the time will come, but has not come yet, when the boys from the "modern" side will be the better. The discipline of Latin and Greek is not absolutely necessary to culture. But the alternative discipline must be made very good and very searching if it is ever going to compete for the best boys with the classical education. As things are, the classical education often turns out the boys who do best when they take up commercial subjects. A manufacturer at the Berlin

Conference on Secondary Education, in 1890, said something of the same sort. And Professor Layton, at the Institut Supérieur de Commerce, at Antwerp, strongly maintains that, up to sixteen, it does not much matter whether a boy is taught classics or not, "provided that he is turned into a thinking animal." Premature cramming is disastrous. The thing to aim at in the early stages of intellectual education is not the amassing of a great deal of specific knowledge, but the development of real interest. The mental powers must not be overburdened, but so trained as to be easily mobilised and used with swift effect on the object to hand.

VII.

This leads to the more general question whether Higher Schools of Commerce are any good at all. The experts still differ in opinion, though perhaps not so radically as might at first sight appear. Sir Bernhard Samuelson, in his Presidential Address to the Association of Technical Institutions in London, on January 28th, 1898, made the following observations:—

"The subject of commercial education was discussed at great length by the International Congress on Technical Education which met in London last year. I must confess that neither the arguments of the speakers nor what I have been able to learn about Continental Schools of Commerce induce me to believe that specialised secondary day schools for commercial education are at all to be desired. Institutions like the London School of Economics and the Ecole des Hautes Etudes Commerciales at Paris are, no doubt, of the greatest value for training members of the consular service, actuaries, and heads of great financial houses, but they have little bearing on the rough-and-ready processes of industrial and commercial life."

Sir Philip Magnus, in the course of a letter printed in the *Times* of March 14th, 1898, stated his opinion in the following terms;—

"The fact that no first-class commercial institute is to be found in this country is partly due to the slowness of Englishmen to recognise the value of higher education for trade purposes. Only very recently have English manufacturers awakened to the necessity of the higher technical instruction; and even now the funds available for the purpose bear no comparison with those freely expended in other parts of Europe. The striking difference between the German and English methods of making education auxiliary to industry is shown in the difference between a German and an English polytechnic institute. The one is intended for the thorough and complete training of the superior officers, and the other for the partial instruction of the rank and file of the industrial army. So, too, in commerce, the higher professional education of those who are to direct our commercial undertakings has been and is still almost entirely neglected in this country, whilst our efforts have been directed towards supplementing the office training of the ordinary clerk. It is to the problem of higher commercial education that public attention should be now turned.

"There can be no doubt that German and Belgian merchants and manufacturers have been materially assisted by the ready supply at home of well-trained agents, who have been educated in the high schools of commerce; and, having regard to the new avenues of trade which recent events are likely to open up for France, Russia, and Germany, the necessity of adopting every possible means of adequately equipping our own youth for the growing competition has become a national obligation."

One thing, at any rate, is quite clear, that all persons of experience

heartily reprobate the thrusting of so-called "commercial subjects" into the curriculum of secondary day schools. "All subjects are equally educational, if properly taught," is a remark sometimes heard from the apologists of premature specialisation. It is not true. Experience, authority, and common-sense are all against it. There is a certain range of attainment which an educated man ought to possess, and the years which can be devoted to liberal education are, in ordinary cases, severely limited. To cram up little boys of fifteen with odds and ends of commercial law and generalisations of commercial geography is to waste precious time which might have been devoted to subjects not only more elevating in themselves but also more digestible by youthful minds. A school time-table which offers Latin and shorthand as alternatives cannot properly be called a curriculum. It is more like a shop-window, from which the passer-by may choose whatever wares seem to him attractive.

There is a further agreement that commercial classes in evening continuation schools, however excellent in themselves and well suited for their purpose, are not in the least the same thing as the course of study offered by a Higher School of Commerce. These are as different as a Volunteer private's weekly drill is different from the course of study which a young officer undertakes at Woolwich or Sandhurst.

There is also a fairly general agreement that secondary education ought to be a purely liberal education, up to sixteen at all events. The six years from ten to sixteen have been found by experience to be short enough for the minimum of general culture needed by a man who is being prepared for a line of life, whether professional or commercial, which calls for a fairly good education. Whether or no in the years which immediately follow his sixteenth birthday a youth, though remaining at a secondary school, can rightly be allowed to specialise in a commercial direction—*e.g.*, to learn Spanish for commercial purposes—seems at present to be an open question. The experiment is being tried at Hamburg, with the approval of the Municipal Educational Authorities, in a non-classical secondary school, with a nine years' course (Oberrealschule).* In the last three years of the course (16 to 19), besides French and English, the boys will learn Spanish. They will give five hours a week to each of the three foreign languages in each case. The lessons will be mostly given in the tongue itself, *i.e.*, the Spanish lessons will be mostly given in Spanish. The whole curriculum for these last three years of the course has been given a commercial tint. The geography becomes more or less commercial geography; the history lessons bear on the economic and commercial development of Germany and other nations. The science lessons will give the boys an insight into the applications of physics, chemistry, and electricity to industrial needs. But this is only one aspect of the last three years' work. Alongside of it,

* The experiment is also being tried at Hamburg in the last three years (16-19) of the Realgymnasium des Johanneums. This school teaches Latin as an obligatory subject after the first three years of its nine years' course. A boy may thus learn Latin for the three middle years of his course and then be drafted into the non-classical, commercial side for his last three years. The commercial upper classes at this school are also open to pupils who have satisfactorily completed the first six years' course at a non-classical school.

the boy's interest in literature and the humanities will be maintained. In German translations he will be required to read the *Antigone* of Sophocles, parts of Tasso, and parts of Calderon, and the whole experiment is based on, and conditioned by, the fact that for the preceding six years he will have received a liberal training without any foretaste of commercial interests.

It seems also to be generally agreed, and especially among Englishmen resident abroad and familiar with the products of the two systems of secondary education, that there is grave need for improvement in the methods of teaching modern languages in many of our secondary schools. A fluent and accurate knowledge of the structure, rhythm and idiom of two living tongues, besides his own, is a valuable possession for any man, and not least for one whose life is to be spent in trade. Happily this part of a man's equipment can be given to him, without strain or premature insistence on commercial technicalities, during the years devoted to liberal education.

But when we come to the question of "a commercial University," agreement ends and sharp controversy begins. There is in England a strong native instinct against theoretical experts.* Perhaps, therefore, it is not unfair to say that we ought to guard against a certain natural bias against schemes of higher professional training, given in special institutes. One thing at any rate is clear, that "business life" means a number of quite different callings, with needs for different kinds of specialised knowledge. One course will not fit all, any more than the same specialised course of professional training would fit a clergyman or a doctor. This point is brought out in Mr. Sidney Webb's admirable paper on "The Provision of Higher Commercial Education in London," read to the International .Congress on Technical Education in 1897.†

"It is useless to appeal to the clerk or business man *as such*. The great world of clerks and business men, who seem to the academic student to form a single class, must be broken up. The merchant, the shipowner, the corn factor, or produce broker and their *employés*, may perhaps form one large group. The insurance clerks, actuaries and public

* The feeling against higher commercial education seems to have its counterpart in other branches of the national life. The following passage is taken from the *Globe* of Jan. 25, 1898:—"The Lord Chief Justice, in an interesting speech he delivered at the annual dinner of the Hastings Law Students' Society, repeated the demand for the establishment of one great school of law in London, which he originally made at a meeting held by the Council of Legal Education in Lincoln's Inn Hall more than two years ago. Hardly anything has been heard of the scheme in the interval, except so far as it has been added to the programme of the advocates of a teaching university for London. In the Inns it has not received the support which Lord Russell hoped for. The prevailing opinion is that when he speaks of the English system of legal education being worse than that in any Continental country or in America he mistakes the true object of legal education. If its real purpose were to produce 'a body of jurisconsults, who would be looked up to by foreigners as well as by ourselves, as we look up to the great writers on law that belong to other countries'—men who write not merely for their own day or for some particular object, but for the sake of science,' Lord Russell's plan might have much to recommend it. But, after all, the true object of legal education is to provide the members of the profession with the means of becoming good practising lawyers, and not to produce a race of theoretical jurists."

† Printed in the *Journal of the Society of Arts*, August 6, 1897.

accountants, who in London number some thousands, require something quite different. The great army of railway officials, from the assistant traffic manager down to the youngest clerk in the railway clearing house, need yet another kind of instruction. The clerks in banks and finance houses have specialised wants of their own. Finally, there are the tens of thousands of clerks and officials employed in the various branches of public administration. Probably there are several other distinct groups needing separate treatment.

"So long as we offer these groups indiscriminately 'Commercial Education' in the lump, they will, quite rightly, pass by on the other side. But put before any one of these classes a definitely specialised curriculum, based on the actual needs of their calling, and experience proves that the abler, the more industrious and the more ambitious of the young men will begin to take an intellectual interest in their occupation, and desire to learn something more about it than they pick up at the office."

Broadly speaking, it is for the first of Mr. Webb's classes (*i.e.*, for those who are to be brokers and merchants engaged in foreign trade) that the Institut Supérieur de Commerce caters at Antwerp, and the École Supérieure de Commerce at Havre. It is *partly* for men engaged in the great export and home publishing trade that the curriculum of the Handelshochschule at Leipzig has been designed. And it might be added that the Consular Service and the non-official branches of the Commercial Intelligence Service find able recruits from among the students at the Higher Schools of Commerce. A journalist, intending to specialise in the work of acquainting his fellow-countrymen with the commercial needs and industrial openings of distant countries, would probably find in such an institute an excellent and useful course of preparation. For many of the officials employed in various branches of the public service, central and municipal, the curriculum of the London School of Economics and Political Science, like that of the École Libre des Science Politiques at Paris, provides admirable guidance and stimulus.

But a further difficulty remains unstated. The idea of the Antwerp Institute, of the Leipzig Handelshochschule, and of the French Écoles Supérieures de Commerce is to provide a systematic *day* course for students who will devote themselves to its claims as much as an honour man at Oxford or Cambridge devoted himself to the claims of his "Schools" or Tripos. But a clerk at work cannot do this. He can only offer the tired leavings of his time. He cannot throw himself heart and soul into his course of study, directing his whole strength to that and nothing else. Day by day he has to render to his employer the service for which he is paid. Obviously, therefore, a systematic course organised for day students cannot be equally fitted to the needs of evening students also. The requirements of the one class or of the other must be regarded as foremost by the authorities of the Institute. The same professors cannot carry on the laborious work of taking classes all through the daytime and on all the evenings too. Such an arrangement might appear to succeed for a time, but in the end it would sterilise the instruction by depriving the teachers of their leisure for reading and private observation, and, what matters as much as either, their free time for quietly thinking [illegible] their mind. An overdriven, leisure-

less staff of professors could never build up a really *thinking* institution. Sooner or later they must become hacks. They would lose their infectious power of stimulating thought in others, which is one of the most valuable elements in all educational work, perhaps the most valuable, but which is destroyed by a perpetual sense of hurry, of "drive," and of interruption to trains of thought. Doubtless, a really great evening college can be organised and maintained as easily, or nearly as easily, as a really great day college. But the same staff cannot maintain the high efficiency of a full course of day work and of a full course of evening work as well. And, if the choice falls in favour of making the efficiency of the evening courses the principal end in view, the Institute is bound (unless it employs a second and practically distinct staff for the purpose) to fail in offering an equally good day course. But, in so far as this happens, it would not be strictly comparable to such an institution as the Institut Supérieur de Commerce at Antwerp.*

If, on the other hand, the day courses were made the chief, or only, object of the Higher School, it follows at once that its advantages would be accessible only to an insignificant fraction of the clerks or business men already at work. Here and there an employer might give a clerk a certain amount of time "off," but no employer could afford to spare his clerk for the whole time needed by a systematic and "honours" course of day study extending over two or three years. Such a Higher School would, therefore, have to appeal to students whose parents were rich enough to spend the money on their advanced education, or who were themselves willing to undergo some privation in order not to miss their "University" course. The latter class is larger than we sometimes realise. In America it is very large, and at nearly all the American Universities there are men who earn in the vacations the pittance on which they live during term time. But for it to be worth while for clerks thus to put off their time of entering on office work, and to make great personal sacrifices in order to gain higher specialised education, there must be some general tendency on the part of great employers to encourage this kind of study, and to welcome into their employment men who can produce the full diploma of a Higher Commercial School. Whether this is likely to be the attitude of sufficiently large numbers of English merchants in the immediate future the present writer cannot confidently say.

If it is not likely to be their attitude, a Higher School would have to rely for its main and regular support (apart from "occasional hearers") on (1) the sons of rich men; (2) a certain but limited number of men who thought it a sufficiently good investment to spend a large part of their capital on these two years of specialised education; (3) the holders of scholarships awarded by local bodies or out of public funds; and (4) foreign students. It is probable that from the last three categories would come the more industrious students. The son of a wealthy merchant, for whom a place in his father's business is being kept open, has no spur to keep him at his work. Here and there young men of this class are naturally

* Doubtless one Principal might supervise day and evening classes, but in that case the danger would be lest he should become chiefly an organiser and administrator, instead of giving the best of his strength to study and teaching.

industrious or naturally keen about the intellectual side of their future calling. But would any one say, from his experience, that such are numerous in proportion to the whole? When they do exist, they are first-rate. But then it is exactly in these cases that a parent can secure for his son, even under present conditions, the greater part of an excellent higher commercial education. He can get for his son special opportunities; he can pay for his special tutors; he can send him abroad or round the world; he can perhaps obtain for him permission to work for a time in an office abroad. And might not such a parent naturally say that what he wants for his son is not to be shut up from the age of 18 onwards among purely commercial interests, but to enjoy the best liberal education which his country and his time afford. In England he would probably send the lad to a great public school, for the sake, not only, or perhaps mainly, of what is taught there, but for the sake of the life of the place, for its traditions, for the opportunity of measuring himself against some of the picked youths of his own generation and growing up among them in friendly and natural relations (relations which, in after life, are not without value from a purely business side), and then he might send the youth on to Oxford or Cambridge—very much for the same reasons. But when the young man had taken his degree, he would be 22 or 23. A journey round the world or to some distant countries might take up the better part of a year or more. Is he then, on the top of all that, to go to a Higher School of Commerce for two years more? If that were done, would he not enter upon his work in life too late? Perhaps not, but the difficulty at any rate should be faced, and the fact that some parents would shrink from such a delay taken into account.

It is a matter of common knowledge that public-school men and University men are more and more coming into business life. Many parents, who have themselves been successful in business, realise how much they themselves missed through not having been at a first-rate school and at College. It is often not so much the lack of book-learning which they regret as the loss of the pleasant associations of public-school life and their being shut out from the free-masonry of public-school and University connexions. They therefore make a point of giving these opportunities to their sons, who will in due course join and follow them in their business. When the experiment succeeds, it often succeeds admirably. Apart altogether from any purely intellectual gain, the young man enters on his work in life with the advantage of having a wide circle of friends and acquaintances among the brightest of his contemporaries. Thus, though he may be quickly drawn into the *engrenage* of business life, he will always have personal connexions with a considerable number of men in other callings and professions. He will start with a certain social advantage. On the other hand, we often hear of the experiment failing disastrously. It sometimes turns out that the young man, through not having been broken in early enough to the drudgery and confinement of office work, never seems able to apply himself to business duties with the interest

and resolute endurance necessary to success. He thinks more seriously of his games and amusements than of his work. In these cases, the father is often forced to the mortifying conclusion that, if he had taken his son away from school earlier, he would have made of him a more strenuous and successful man of business. Thus, whether it is wise or foolish to give a public-school, or a public-school and University, education to a youth destined for business life depends in great measure on his character and natural disposition. These again will depend not a little on his early up-bringing at home and on the degree of luxury and self-indulgence to which he has been accustomed from the first. If the lad's home training and other causes have left him lacking in will-power and concentration of purpose, he will as likely as not be disqualified, rather than helped, by being exposed through so many critical years to the rather distracting tendencies which he is certain to encounter in some sets at school and college. Unless he has a good deal of self-control and a clear aim in life, this kind of education may spoil rather than fit him for business duties. But, even in the case of lads who are proof against the ordinary temptations to indolence or dissipation, we often hear the doubt expressed whether the normal course of studies at an English public school is as well designed as it might be to meet the needs of those who, at 18 or 19, will be obliged to enter one form or other of commercial life. Is it not possible, many parents ask, to frame a scheme of work which shall be every bit as thorough and exacting as a good classical training without being so remote from modern interests and modern needs? Is it not possible, without in any way inducing premature specialisation, to use, as the subject-matter of a boy's school-training, languages and other branches of study which will naturally prepare him for the more specialised interests of his future calling as a man of business? Is it not at present often the case that a boy, on leaving a good school for commercial life, finds a sudden break in his intellectual interests and is plunged into an entirely new world which his school lessons have not directly prepared him to understand? For some professions there is admittedly no better preparation than that afforded by the classical education as we know it at its best. But for a youth intended for commercial life, would it not almost invariably be better to get at school a thorough grounding in French and German, in history and literature, in the elements of science and of mathematics, and in some forms of manual exercise, than to learn a little Latin and Greek at the price of having to give less time to the studies which are at least an equally indispensable part of modern culture?* In short, in the case of boys who, from their eighteenth or nineteenth birthday, are destined for business life, do we as a rule help them to make as good a use intellectually of their years of school life as we might do if we greatly developed the "modern sides" of our chief public schools and

* I am, however, very far from wishing to decry the intellectual value of early, well-directed discipline in Latin grammar, translation, and composition. It is an open question whether any alternative form of intellectual drill is more efficacious in early training than the classical education *at its best*. But it is not always at its best. And there are other claims on time.

thus raised the educational status of a curriculum more adapted to their special needs, and so designed it as to secure a definite foundation of knowledge in those studies which are closely related to the conditions of their future life? May not the same question be put with even greater force in regard to boys whose school education has to end when they are sixteen or seventeen? It is well known what admirable work is being done by the modern sides of many important secondary schools in England, but there is reason to think that much more might be done towards providing, as an alternative to the classical discipline, but otherwise under the same general conditions of school life, a purely non-classical curriculum with a standard of attainment as exacting as that which prevails on the classical side. The classical and the semi-classical curricula may fairly be said to have received due recognition among us; but in England the non-classical curriculum is still the Cinderella of secondary schools. Yet, by developing the best kind of non-classical secondary education, should we not lessen the danger of a lad's dropping his school subjects altogether as soon as he leaves school, and make it easier and more natural for him to carry forward the work of self-culture during the leisure hours permitted by his calling? Might we not thus give a youth a more intellectual interest in his occupation and furnish him before-hand with the well-arranged and worked-in knowledge upon which he could at once begin to build up more specialised attainment? Such questions as these are not unfrequently heard, and they point to a growing desire for a combination of the unequalled advantages of English public-school life with a curriculum more skilfully adapted to the needs of modern business. So far as curriculum goes, there is reason to think that the Germans in their Realschulen and Oberrealschulen have got nearer to solving the problem than we have. But in the sphere of physical development and on the character-forming sides of school discipline many Germans would be among the first to admit that we are nearer the goal than they. The difficulty lies in combining the very different merits of the best German and the best English secondary schools.

It is possible, indeed, that if the young man during his last two years at school, and during his time at the University, could undertake a course of study, not commercial in the strict sense, but *definitely preparatory to modern life*, he might be able to get all that he needed in one year's subsequent study at a Higher School of Commerce. By an academic course preparatory to modern life I do not mean a course entirely devoted to modern history, or one entirely devoted to natural science, or one entirely devoted to modern languages and literature, but a course combining in due proportions the essential elements of all three, and not based on the principles of the "pass schools," but an "honour" course in its point of view, in its stimulus, and in its range of intellectual interest.

I am far from meaning that, even when every deduction is made, there would not be sufficient support in England, and especially in London, for a day Higher School of Commerce. But the sources of

supply of English students for a day course in such a school would probably be more limited than at first sight appears. A considerable number of foreign students could doubtless be depended upon. But, in any case, the cost per head would be prohibitive for poorer men, unless the institution was largely endowed. The present writer sees no reason for believing that it could be conducted on a self-supporting basis, in such a way as to maintain the high quality of professional teaching which would be essential to success. The institution could not be run on the cheap. The more you specialise higher education, as Mr. Webb has pointed out, the more you need subsidy and endowment. Higher education of the University rank cannot pay its own way. And nothing short of teaching of University rank would deserve the name of a Higher School of Commerce.

Lastly, it is obvious that no school or college, however largely endowed and brilliantly staffed, can make a stupid or lazy young fellow into a smart and successful man of business. Nothing can make up for the absence of hard work and application and brains on the part of the student himself. Nothing again can supply the place of the imaginative gift, the prudent daring, the instinctive sense for what is possible or probable, which is the dash of genius in a great man of business. Character, tenacity, insight, courage—these are gifts, partly of nature, partly of cultivation, which no mere teaching can ever bestow. But, given these, is it likely that *in commerce alone* a systematic course of highly specialised education is to bear no useful fruit? Is commerce the one exception among all callings where the kind of knowledge, and the power of using knowledge, which comes from long and careful education, is of no value? It seems more in accordance with the nature of things to suppose that specialised training would improve certain kinds of raw ability and raise even the higher forms of business faculty into something higher still.

MICHAEL E. SADLER.

April 15, 1898.

Postscript.- Since this paper was written, there has been held in London, on July 8, at the invitation of the London Chamber of Commerce, an important conference on Commercial Education. The discussions showed a remarkable consensus of opinion that the first stage in the education of a business man must be a searching and liberal course of training at a secondary school. A number of valuable papers were read on different aspects of the problem of higher commercial education, and these, when published, will form a useful addition to English educational literature.

The Technical Education Board of the London County Council has taken active steps to consider the problem of higher commercial education with special regard to the needs of London, and there is good reason to hope that their efforts may lead to something being done in London on an important scale at an early date.

The quarterly report of the Board, dated July 25, 1898, contains the following paragraphs on the subject:—

"On the 17th May, 1897, the Board adopted the following resolutions:—

"(1.) That a Special Sub-Committee be appointed to consider and report on the special agencies which exist within the County of London for giving commercial education, and to suggest plans for establishing other agencies and increasing the efficiency of those already in existence.

"(2.) That the Special Sub-Committee consist of the chairman and vice-chairman of the Board and the chairmen of the Standing Sub-Committees.

"On the 12th day of July, 1897, the Board added to the sub-committee the following members:—

"Mr. Frank Debenham.
"Mr. James Easterbrook.
"Sir Philip Magnus.

"The Special Sub-Committee has accumulated much information respecting the teaching of commercial subjects in the higher elementary and secondary schools in London, as well as in schools and other institutions of all grades dealing with commercial education on the Continent, and has also obtained particulars respecting the examinations conducted by many professional bodies, such as the Institute of Bankers, the Institute of Actuaries, the Society of Accountants, the Chamber of Commerce, etc.

* * * *

"Without anticipating the conclusions at which the Sub-Committee may arrive on the several subjects referred for its consideration, we may take the present opportunity of pointing out that whatever divisions of opinion exist on some questions connected with commercial education, there appears to be a very strong feeling among commercial men and educational experts in favour of the establishment in London of a higher commercial school for the education of the leaders of commercial enterprise between the ages of, say, 18 and 21, and it is believed that, in the course of a few years, the experience of Continental schools will be repeated in London, and a school of the kind contemplated will be filled with students intending to enter the higher branches of commercial life. In the meantime there is a very extensive field for the operations of the school in improving, by the training of teachers and otherwise, the teaching of commercial subjects in the existing day and evening schools and classes, and in rendering possible the establishment on sound lines of commercial continuation schools which shall take pupils from the higher elementary and secondary schools, and continue their commercial education up to the standard at which they might obtain admission to the classes of the higher commercial school. On this subject we have

received a report from the Governing Body of the City of London College, that institution having obtained a promise of a contribution towards the expenses of a higher commercial school from the Central Governing Body of the City Parochial Foundation, and we think that these proposals respecting the establishment of a higher commercial school may form a basis on which it may be possible to frame an acceptable scheme of higher commercial education."

July 27, 1898.

M. E. S.

APPENDIX I.

A LONDON BANKER'S VIEWS ON THE EDUCATIONAL EQUIPMENT OF ENGLISH YOUTHS ENTERING BUSINESS LIFE.

[The following notes have been communicated to me by a gentleman who, as a banker in the City of London, has had exceptional opportunities for comparing the standard of actual knowledge possessed by English and foreign youths on entering business life. I have reason to believe that the views to which he gives expression are widely held in banking circles in London.—M. E. S.]

Having been in business for five-and-twenty years, starting first as a clerk in a merchant's office and now partner in a banking business, I have had some experience of clerks, both English and foreign. The ordinary age of a boy to start in an office with the view to being a clerk is about seventeen. As a rule they write a fairly good hand, but they are very slow in ordinary arithmetic, and the way they have been taught to work is slow and cumbersome. For boys who are destined for a mercantile career they have been taught nothing of the rudiments of exchange or arbitrages, and this has all to be learnt at the office. However, an intelligent boy quickly improves in this respect in a year or two. In fact, for the first twoor three years a boy is very little help in an office, as he has so much to learn. Even, if he were taught at school the rudimentary elements of book-keeping and foreign exchanges, it would be a great assistance to him from the very outset. As regards foreign languages the ordinary English boy in that class of life knows next to nothing. He may be able to read an ordinary French business letter, more rarely German. He has no colloquial knowledge of either French or German, and is quite unable to write an ordinary business letter.

Now let us look at the higher grade of young men, I mean those who have been to the public schools and universities. From this class a larger number appear to go into business every year. In many cases they are sons of business men and will in process of time, if they show ordinary ability, obtain partnerships with their relations or friends, or if they are hard-working and energetic start some business on their own account. This class of young men as a rule, from their superior education, learn the rudimentary work of an office fairly quickly and easily. As regards foreign languages however, in the majority of cases the same remark applies to them as to the ordinary clerk. Unless they go abroad after completing their education here, modern languages are to them a sealed book. This, of course, entails loss of valuable time to the young man and considerable expense.

For commercial purposes French and German are absolutely essential, and a knowledge of Spanish very desirable, and this our present system of education does not give, either to clerks or to principals, and until this defect in our education is remedied, so long will the foreigner in large numbers be employed in our offices.

I think it right to add that in the above remarks, I have not touched on any points of character, but have confined myself simply to a comparison of intellectual attainments.

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APPENDIX III.

PROGRAMME OF STUDIES, &c.,
OF THE
HIGHER SCHOOL OF COMMERCE AT ANTWERP.

(This Institution was established by virtue of a Royal Decree of 29th October, 1852.)

It is under the Department of Industry of the Mining of Industry and Public Works.

Rules and Prospectus.

The practical and theoretical course of instruction given at this Institution extends over two years.

Each student is entered on the register of the Institution on payment of an annual fee of 25 francs or £1. This fee is reduced to 5 francs each course for those entering for less than five courses.

To the general course of instruction (including the Bureau or Commercial Office), those students only who have successfully passed a preliminary examination are entitled to subscribe. The subjects of this examination are given in the programme.

The subscription for the first year is 200 francs or £8. The general subscription for the second year is 250 francs or £10; if renewed, one half of these fees only is paid. But no student can enter for the classes of the second year unless he shall previously have passed a satisfactory examination in all the subjects of the first year.

Special branches. Students not desirous of passing an examination can attend one course or several, the fee for each one being 30 francs, and half that sum if renewed.

The special subscription to the Commercial Office is 100 francs a year. Those students only are admitted who have previously subscribed to at least four of the other courses of lectures.

Candidates can enter at any period of the year, but no reduction is made in the terms.

No examinations are held in the case of special subscriptions, except for the Commercial Office, to enter which a student must pass an examination (before the Director and the Professors of the Office) in the rudiments of book-keeping, commercial arithmetic, and the French, German and English languages. Such examination may take place at any period of the year.

Students taking special subjects only, obtain neither diploma nor certificate when they leave the Institute.

Examinations.—The examination for admission to the classes of the first session takes place once a year, at the beginning of October, before an Examining Board appointed by the Government, and presided over by the Director of the Institute.

The subjects of this examination are:—

1. A composition in French and a translation from French into German and English.

2. Physical geography.

3. Commercial arithmetic, elements of algebra (Bourdon) and geometry (Legendre, the first four books).

4. Book-keeping.

5. Rudiments of natural philosophy (Ganot) and of chemistry (Th. Swarts).

6. Rudiments of universal history (Borgnet's Ancient History and that of the Middle Ages, and Th. Juste's Modern History).

7. Commercial law.

8. Political economy.

Every year, in the month of January, those parts of universal history necessary to be studied for the October examination, are indicated by the Department of Public Instruction.

The foregoing are modified in favour of foreigners, especially as regards languages.

A preparatory course of instruction for the acquirement of the branches of this examination is also given by the Professors of the Institution. It extends from Easter to 15th August. The charge is 100 francs, payable in advance. In this course special attention is devoted to foreign students.

Further particulars are given in a separate prospectus, which may be had on application to the Director.

Students furnished with a certificate showing that they have passed an examination under a British University or other recognised examining body are admitted without examination, provided that such certificate includes all the subjects of the entrance examination.

The examination at the end of the first year, for admission to the courses of the second, takes place at the end of the session every year. The Professors, the Director and the Government Inspector are the examiners. The subjects of this examination are mentioned in the programme.

After the second year has elapsed, examiners specially nominated by the Government deliver certificates, conferring the degree of Licentiate in Commercial Sciences, to such students as pass the requisite examination; and any Belgian student who has displayed special proficiency may obtain an Exhibition enabling him to travel abroad during several years at the expense of the Government. The subjects of this examination are mentioned in the programme.

General Observations.—The lectures at the Institution commence in the second week of October. Being delivered in French, foreign pupils ought previously to have acquired some knowledge of that language; without this their progress would be much impeded.

The transactions in the Mercantile Office are carried on in the languages most generally used in commerce.

The Professors have the right to enforce order during their lectures; they are authorised to admonish and even temporarily to expel any students who are disorderly.

The students are expected to attend regularly and assiduously the courses to which they have subscribed. Absentees are noted and the parents are duly informed of such irregularity.

The Professors have the right, at any time, to interrogate their pupils, for the purpose of ascertaining whether or not they are making satisfactory progress in their studies.

Should remonstrances or admonitions prove unavailing, refractory students may be temporarily dismissed from the Institution; or, if found necessary and after three distinct warnings, they may be expelled finally by the Committee of Management.

The students find their own books and papers as well as the account-books necessary for office-work.

A *library*, specially composed of works on commerce, is annexed to the Institution, as well as an extensive *Museum of Mercantile Productions* of all kinds. For these a special fund is granted, and many valuable specimens are furnished by Belgian Consuls and others. This collection is increasing and is of great value in illustrating the study of commerce and manufactures.

Practical lectures are delivered to the students on trade and commerce in general, and on mercantile transactions of every nature, also on the

building and fitting out of merchant ships. These lectures are given either by the Professors attached to the Mercantile Office or by other well qualified persons selected or approved by the managing Committee. Some of the most experienced brokers on the Antwerp Exchange also, occasionally, volunteer to give lectures on the most important articles of colonial produce.

The various courses take place in the morning and afternoon, before and after the hours of the Mercantile Office, the latter corresponding with those of the merchants' counting houses in the town, in order to enable anyone occupied in business to attend the same if so disposed. These hours are fixed in the course of the year by special regulations.

There are three vacations in the year. The long vacation taking place from the 15th August to the second Tuesday in October; the other from the Monday before Easter to the second Tuesday following, and from the 23rd December to the first week of the New Year.

The Institution is established on the footing of a University. Consequently, students do not lodge within the establishment. They either take furnished apartments in the City, or board with one of the Professors.

No particular age is required for admission, but young men under the age of seventeen years are seldom apt to derive much benefit from the instruction given. The age of the students generally averages from eighteen to twenty years. Older ones, however, are admitted.

The Institution is placed under the control of a Committee of seven members, of which the Burgomaster of the city of Antwerp is, *ex officio*, President. The other six are nominated: three by the Government and three by the Municipal Council of Antwerp.

The Governor of the Province of Antwerp presides over the Managing Committee when present at the meeting.

The Director has the general management of the Institution, maintains order and discipline, and communicates with the authorities, as also with the parents of the students when required.

All communications should be addressed, prepaid, "To the Director of the Institut Supérieur de Commerce, Rue des Peintres, Anvers."

Committee.

The Burgomaster of the City of Antwerp, President.
A. Havenith, Esq., Director of the "Banque d'Anvers."
Dewinter Lauwers, Esq., Member of the Chamber of Representatives.
J. Van Beylen, Esq., Merchant.
G. Gits, Esq., formerly Alderman of the City of Antwerp.
Ed. Van Peborgh, Esq., Average-Stater, Member of the Common Council.
Felix Ceulemans, Esq., Merchant, Member of the Common Council.
Edm. Grandgaignage, Esq., LL.D., Director.
J. F. De Jongh, Esq., Secretary.

Programme of the Courses of Lectures.

PREPARATORY COURSE.

(Subjects for the Examination for Admission).

French	3	hours lessons	a week.
German	3	do	do
English	2	do	do
History	3	do	do
Geography	3	do	do
Book-keeping	3	do	do
Arithmetic	3	do	do
Algebra	2	do	do
Geometry	2	do	do
Natural Philosophy	2	do	do
Chemistry	2	do	do
Commercial Law	2	do	do
Political Economy	2	do	do

This course begins about the 15th April and terminates on the 10th August—but it may be prolonged if found necessary.

First Year.

(Subjects of the Examination for Students about to pass into the Second Year).

I.—BUREAU OR MERCANTILE OFFICE.

Messrs. Edm. Grandgaignage, Chief of the Office.
L. Van den Hende, Assistant Professor.

Three hours every day.

Pro-forma operations of a general house of business where all kinds of commercial transactions are daily carried on in goods, fitting out vessels, banking, etc.

Practical demonstration and application of commercial arithmetic, invoices, account sales, account of charges, accounts current, calculations of the cost of goods, etc., exchange operations, public funds, book-keeping in all its branches, commercial contracts, arbitration of exchanges, bills of lading, charter parties, bottomry bonds, insurance, averages, usages of Antwerp and of the principal places, comparison of weights and measures, etc., etc.

Every operation is entered in books kept by single and double entry; these books are balanced, stock is taken and affairs of the house liquidated at the end of the year.

Correspondence is carried on in the French, German and English languages, as in the regular business of a mercantile house.

Professor Nitschké superintends the German correspondence.
Professor William Layton, the English ditto.
Professor Truyens, the Dutch ditto.

II.—DESCRIPTION OF MERCHANTABLE ARTICLES AND PRODUCTS.

(1st year).

Professor, Ch. Angenot.

(The Professor may call in the attendance of one or several assistants).

Twice a week.

This course is illustrated by means of the samples in the collections annexed to the Institution.

Investigation and study of the following products:—

Sulphur, acids, phosphor, iodine, carbon, ammoniac, arsenic, metals, potash, soda, lime, magnesia, alumina, baryta, manganese, iron, steel, cast-iron, oxide, sulphate, and cyanite of iron, chrome and chromates, cobalt, smalt, zinc and its compounds, tin, lead and its compounds, bismuth, antimony, copper and its compounds, mercury, gold, silver, platina, pumice stone, tripoli, sand stone, slates, marbles, clay, esculent, industrial, medicinal and aromatic roots, timber and cabinet woods, dyewoods, barks and cinnamon, oil-leaves, laurel, senna, sumac, tea, tobacco, flowers, chamomile, cloves, dyes, hops, saffron, etc. Fruits of all kinds, pepper and pimento, Vanilla.

Hemp, rapeseed, linseed, etc. Clover, etc. Grain: wheat, rye, barley, oats, buckwheat, maize, rice, flour, coffee. Cotton, hemp, flax. Cellular vegetables: mushrooms, lichens, etc. Indigo, arnotto, orchilla, cutch, aloes, etc. Fecula, Italian paste, raw and refined sugars.

III.—POLITICAL ECONOMY AND STATISTICS.

Professor C. De Cocquiel.

Twice a week.

I.—Object of Political Economy; utility and nature of the science.—Causes which have impeded its progress.

II.—Production.—Analysis of the elements of production.—Labour.—Natural Agents.—Capital, of what it consists and what part it is acting in production.—Classification of capital.—How capital is created and increased. —Importance of increase.

III.—Inquiry into the causes of the greater or smaller productiveness of the producing powers in different countries.—Property.—Division of labour.—Ideas of Adam Smith on the subject.

IV.—Values.—Their definition.—The laws which regulate them.—Supply and demand.—The expenses of production.—Prices.

V.—Money.—The value of money.—Variation in the value of the precious metals and the consequences resulting from it to Economy and Society in general.

VI.—Credit.—General notions of credit.—Its importance in production.—Institutions of credit or banks.—Various descriptions of banks: banks of deposit, commercial banks, banks of circulation.—Circulation of irredeemable paper or paper money.—Credit on land.—Credit as a means of rendering the use of money less frequent.—Influence of credit on prices.—Commercial crises.

VII.—Equilibrium between production and consumption.—Whether there can ever be an excess of production.

VIII.—International trade.—Necessity and advantages thereof.—Free trade between the different nations, and the system of Protection.—Influence of money in international exchanges.

IX.—The forms of production.—The principle of association.—Commercial Companies.—Production on a large and on a small scale.

X.—Distribution of wealth.—Wages.—In what manner they are regulated.—Population.—Examination of the opinions of Malthus on the subject. How the condition of those who receive wages may be improved.—Profits.—Analysis of the elements which constitute them.—In what manner they are regulated.—The rate of interest.—Inquiry into the laws limiting this rate.—Rent of land.—Theory of Ricardo.

XI.—In what manner Governments procure the necessary resources to provide for the public service.—Taxes.—Their influence on the development of riches.—Necessity of taxes.—Progressive tax and proportional tax.—Income tax.—The incidence of taxes, or on what persons they are imposed.—Public credit.—State loans.—Annuities.—Redemption and conversion.—Whether loans are preferable to taxes to meet extraordinary exigencies.

XII.—Statistics.—Their object, utility, character, etc., etc.

IV.—COMMERCIAL AND INDUSTRIAL GEOGRAPHY.

Professor Felix Noël.

Three hours a week.

Topographical and statistical information on the different countries of the world. This information, drawn from the latest Consular reports and the most recent communications, refers to the following points:

I.—Topographical situations, constitution of the soil, mineral, vegetable, and animal kingdoms.

II.—Political and social state.—Institutions, their influence on the prosperity of the country.—State of finances, national wealth, prosperity or decline, their causes.

III.—Principal productions of each country. Commodities which can be procured from it with advantage.—Statement of its exports.

IV.—Principal products for which every country applies abroad.—Those which Belgium in particular supplies.—Those which she could yield besides.—Return of imports.

V.—The character of the economical and customs legislation of each country.—Hindrances and facilities in the way of trade.—Tastes, habits of population in their connection with trade.

VI.—Particular notices of the chief commercial places, their importance, their mode of transacting business, origin and causes of commercial relations between the various countries.

V.—LAW (GENERAL PRINCIPLES).

Professor G. Stoop.

Once a week.

Preparatory instruction for the studies of commercial law.—General notions on the matters contained in the two first books of the Civil Code.—The general principles of obligations explained.—Study of contracts the rules of which are common to the civil and the commercial law, such as sale, hire, partnerships, loans, securities, etc.

VI.—SPANISH LANGUAGE (LOWER SECTION).

Professor V. Valle.

Three hours a week.

Pronunciation, reading, grammar, dictation, exercises and translations, commercial correspondence.—Nuevo-Sobrino (Martinez), dictionary of Martinez-Lopez, etc.—Authors named for the superior class.

VII.—ITALIAN LANGUAGE (LOWER SECTION).

Professor Heinzmann-Savino.

Three hours a week.

Pronunciation, reading, grammar, dictation, exercises and translations, commercial correspondence, mercantile letters, Moretti's grammar, dictionary (of Barberi), authors indicated for the superior class.

N.B.—The students of the first year have the option between the Spanish and Italian languages, but may, however, attend both the courses if they choose.

VIII.—GERMAN (LOWER SECTION).

Professor P. Nitschké.

Three hours a week.

Technicalities.—Commercial correspondence.—Particulars on the commerce of Germany.—Customs, duties, exchange, fairs, auctions, bonding warehouses, ports, banks, brokers, chambers and tribunals of commerce.

IX.—ENGLISH (LOWER SECTION).

Professor William Layton.

Three hours a week.

Commercial technicalities.—Mercantile correspondence.—Commission business. Purchase sale, and forwarding of goods.—Insurance.—Bills of Exchange.—Banking.—Partnership.—Stocks and shares.—Money.—Contracts.—Customs.—Commercial forms.—Conversation.

X.—DUTCH (LOWER SECTION).

Optional for Foreigners.

Professor A. Truyens.

Two hours a week.

Pronunciation, grammar, exercises, composition, commercial correspondence, conversation.

Second Year.

(Subjects of Examination for Candidates for Diploma).

I.—BUREAU OR MERCANTILE OFFICE.

Edm. Grandgaignage, M.D., Chief of the Office.

Pr. Plouvier, Assistant-Professor.

Three hours every day.

Conditions of sales and purchases, general usages in the commercial markets of the different parts of the world completely taught.

Several divisions are formed representing houses established in different countries.—Fitting out of vessels, commission business, insurances, banking, etc.—Import and export transactions; books are kept, accounts made out, bills issued, received and endorsed, exchange operations, information received or given.—The theoretical notions acquired in all the other courses applied to practical questions.—Litigious cases, practical operations completing the knowledge acquired during the first period, accounts kept in each division.—Reports drawn up relating to commerce, finances, and industry in various countries. System of rotation from one division to another to guide every pupil through the different stages of his commercial career.

Correspondence in French, Dutch, English, German, Spanish, and Italian.

N.B.—Commercial reviews.—Besides the daily advices of the Antwerp Exchange, the mercantile office of the institution receives regular advices and commercial newspapers from London, Liverpool, Amsterdam, Hamburg, Havre, New York, Havana, Rio Janeiro, Buenos Ayres, Valparaiso, Sydney, East India, and China.

All these advices being in various languages, are communicated to the pupils in the originals.

Professors Kufal, Layton, Valle, Heinzmann, and Arents respectively superintend the German, English, Spanish, Italian, and Dutch correspondence.

II.—DESCRIPTION OF MERCHANTABLE ARTICLES AND PRODUCTS.

(Course of the second year.)

Professor Ch. Angenot, M.A.

(The Professor may call in the attendance of one or more assistants.)

Twice a week.

This course is illustrated by the samples in the collections annexed to the Institution.

The matters studied and investigated are:—

(1) Continuation of the study of NATURAL PRODUCTS:—

Gum, gum-rosin, India rubber, rosin and gumlac, balsam, turpentine, pitch, tar, oils, oilcakes, volatile oils, fermented products, vegetable salts, cantharides, cochineal, animals' horns and bones, glue, isinglass, etc., raw hides, skins, animals' hair and bristles, horsehair, feathers, wool unwashed or washed, grease, tallow, honey, guano, dried meat and fish, etc.

(2) MANUFACTURED ARTICLES:—

METALLURGIC INDUSTRY: Cast and wrought iron, wire, needles, nails, cutlery, sheet iron, tin plates, metallic plates, wire gauze, ironmongery, metal utensils and apparatus, beaten gold and silver, armoury, printing types.

CERAMIC ARTS: Artificial cement, bricks, paving and roofing tiles, pipes, potters' work, crockery ware, porcelain, window glass, plate glass, glass, bottles, drinking cups, coloured enamel.

Chemical Products: Soap, wax, wax lights, varnish, ink, oil cloth, prepared colours and paints.

Linen Manufactures: Spun flax, spinning mills, thread for lace, sewing thread, brown holland and bleached cloth, dyed linen, table linen, drill, sail cloth, linen cloth for mattresses, cambric.

Woollen Manufactures: Spinning mills, cloths, stuffs, flannels, treble-milled stuff, duffle, woollen blankets, merinos, carpets, etc.

Cotton Manufactures: Yarn, bleached, unbleached, and coloured cotton, woven fabrics, treble-milled cotton, velvets, etc.

Silk Manufactures: Spun silk, silk textures, silk velvet.

Various Manufactures: Ropes, textures for packing, textures of animals' hair, hosiery, ribbons, lace work, gloves, hats, divers products, cured leather, sheep leather, Morocco, harness, saddlery, letter paper, pasteboard, cigars, tools, etc., etc.

These lectures are illustrated by chemical experiments, a laboratory being specially provided for that purpose.

III.—GENERAL HISTORY OF COMMERCE AND INDUSTRY.

Professor C. de Cocquiel.

Twice a week.

(This course is divided into four periods.)

I.—Antiquity.—History of commerce and industry from the earliest times to the fall of the Roman Empire.—First rise of industry and commerce.—The fine arts and their inventors.—Industry and trade in Phœnicia, Egypt, Palestine, and India.—Trade of Carthage.—Industry and trade of the Greeks and Romans.—Slavery in antiquity.—Its organisation and influence on the development of trade and industry.—Ways of communication in antiquity.—State of industry and trade and social condition of the people at the period of the Roman empire.

II.—Middle Ages.—From the fall of the Roman empire to the discovery of America (1492).—Reorganisation of industry after the invasion of the barbarians.—System of the corporations.—How and from what necessity they were formed.—Description of the system.—Hindrances which the feudal system opposed to the development of industry and commerce.—To what causes the Italian Republics and towns of the Hanseatic League owed their commercial prosperity.—Cursory view of trade and industry in Flanders.—From what particular causes our country (Belgium) prospered from the earliest period of the middle ages.—State of the industry and commerce of the world on the discovery of America.

III.—Epoch of Revival.—From the discovery of America up to the invention of the steam engine.—Influence of the discovery of the New World on trade and industry.—New colonies and colonial system.—Mischievous effects of such a system.—Commercial prosperity of Holland and its causes.—Decline of the industry and trade of Belgium after the treaty of Munster.—Manufacturing system of Colbert and its influence on the development of French industry.—The Edict of Nantes and the pernicious effects of religious persecution on industry and trade.—Cromwell's Navigation Act.—The banks of England and Scotland created.—Law's system and the evils to which it gave rise.—Origin of political economy as a science.—History of the first progress of political economy and the authors who began to pursue it.—Sketch of the state of trade and industry at the period of the invention of the steam engine.

IV.—Modern Times.—From the invention of the steam engine to the present day.—Inventions of Watt, Arkwright, Hargreaves, Crompton, etc., and the influence on production.—Character of the vast industry which these inventions gave rise to.—The impulse they imparted to the industry and commerce of England.—The French Revolution and the perturbations consequent upon it to the trade and industry of the world.—How far it served

and hindered the development of production.—The Continental blockade and its effects.—The industrial and commercial progress realised by the principal nations from the peace of 1815 up to the present time.—Enlargement of the ways of communication, especially the railroads.—Steamboats and electric telegraphs.—Economical reforms of England and their influence.—Disturbances occasioned by the French Revolution in February, 1848.—Critical appreciations of Socialism.—Situation of the working classes and the practical amelioration it admits of.—Ameliorations procured by the progress of industry and trade.—Improvements to be realised.—On what conditions.—General situation of commerce and industry at the present epoch.—Monetary question.—Emigration, its causes and influence.—Recapitulation, progress made by society.—In what manner civilisation, having at first been but local, became afterwards universal.

IV.—COMMERCIAL AND MARITIME LEGISLATION COMPARED. PRINCIPLES OF INTERNATIONAL LAW.

Professor G. Stoop.

Twice a week.

Study of commercial law and the modifications introduced up to the present time.—Associations and companies.—Bills of exchange.—Failures and bankruptcies.—Maritime law.—Theory of insurances, etc., etc.—Chief commercial laws.—Laws concerning the Consulates, pilotage, and maritime policies and passes.—Disciplinary and penal code for the mercantile navy and sea fishery.—Laws on licences, letters patent, weights and measures.—Laws on arrest for debt.—Arbitration.—Explanation of the maritime insurance policy of Antwerp.—Remarks on the principal decrees relating to commerce and industry.—General remarks on the commercial and maritime legislation of the principal countries.

Principles of international law in their relations to commerce.—Relations between the states.—Definition and object of international law.—Origin, character, guarantees, sanction and sources of this law.—European equilibrium.—Progress of this law.—Public treaties.—Rights of neutral parties in time of war.—Importance of the flag, etc., etc.

V.—CUSTOMS LEGISLATION.

Professor Maurice de Kock.

Once a week.

I.—Importance of this course.—Relation between political economy and the legislation of customs.—For what reason modern nations attach so much importance to the questions of customs and tariff.—What is understood by Protection.—Protection of conferring a privilege on the producer in the sale of his products.—Protection of another nature, improving the very conditions of labour through the improved means of transport, through the foundations of institutions of credit, professional education, etc.—By what means the transition to freedom can be smoothed in those countries subject to the protecting system.—Effect of the decreasing tariffs.—Statement and comparison of the system of Free Trade and that of Protection.

II.—Different kinds of duties on imports (excise, town dues, etc.), duties on exports, duties on transit, duties on navigation (tonnage and nationalising of vessels), different characters of the duties.—Different modes of applying and collecting duties.—Duties ad valorem, duties on weight.—Pre-emption rendered necessary by the establishment of duties ad valorem.—Criticism on these duties.—Fraud.—Necessary measures to paralyse it.—Frontier lines.—Documents admitted at the customs.—Hindrances to commerce arising from the measures taken to prevent fraud and facilities afforded to merchants to escape such hindrances, transit, bonded warehouses, docks, free ports, etc.

Return of duties on exportations, bounties, drawbacks, release from the excise, duties, etc.

Duties on sugars. Historical account in the principal countries.

Duties on grain and breadstuffs. Sliding scale.

Duties on manufactured products.

Duty on mineral products.

Differential duties.

IV.—Administration of the customs, relations between the customs and the navy, analysis of the customs law.—Smuggling.

V.—The colonies, colonial system of Europe, its effects upon political economy.—Modern tendency to substitute freedom for restrictions.—Colonial system of Holland.—Twofold modification which the colonial system experienced in England in the years 1833 and 1834. Emancipation of the slaves.

VI.—Commercial treaties.—Declarations to reciprocate.—How such declarations differ.—Critical account of the two systems.—General survey of the Belgian tariff, its transmutations since 1830.—How it was modified by the different commercial treaties.—Inquiry into the reform of customs in England begun by Huskisson and accomplished at the present time.

Historical account and constitution of the Prussian commercial league known by the name of Zollverein.—Result and extension of this commercial German union.

Tariffs of France, the United States of America, and other countries, with which commercial relations are the most frequent.

VI.—SHIP-BUILDING AND FITTING OUT.

Professor Pierrard, Government Naval Engineer.

Once a week.

I.—Nomenclature and description of the different parts of the hull, spars and rigging of a merchant ship.—General notions on displacement, and to the careen centre; on stability and on the metacentre.—Influence of stowage on the stability of a ship.—Calculation of the tonnage according to the laws of different countries.—Influence which the different ways of gauging have exercised upon the shapes of vessels.—Proportions existing in the principal dimensions of different kinds of merchant vessels.

II.—General considerations of interest to ship-owners on the building, maintenance and repair of wooden and iron vessels.—Relative advantage and disadvantage of wood and iron in the construction of merchant vessels.—Characteristics of different kinds of materials used in ship-building.—Practical illustrations by means of models.—Workmanship.

(At these stages of their progress the students, accompanied by their Professor, frequently visit the building-yards of Antwerp, as well as the steamers and other vessels in the docks.)

III.—Conditions required by Lloyd's and the French Veritas to obtain the classification of a wooden or iron ship.—Contracts with the builders.—Chief ship-building yards.—Respective prices of vessels constructed there.—Nationalisation of a ship.—Surveys and reports.—Different modes of freighting and loading.—Dead weight and measurement of goods.—Regulations on the transport of emigrants.—Financial results to be obtained from a sailing or steamship, regard being had to the capital invested, either per voyage or per annum.—General considerations on the profits derivable from different kinds of sailing and steamships.

VII.—COMMERCIAL AND INDUSTRIAL GEOGRAPHY.

Professor Felix Noël.

Three hours a week.

Retrospect on the preceding year.

VIII.—POLITICAL ECONOMY AND STATISTICS.

Professor C. De Cocquiel.

Twice a week.

Retrospect on the preceding year.

IX.—GERMAN (HIGHER SECTION).

Professor P. Nitschké.

Three hours a week.

Commercial technicalities.—Commercial correspondence.—Invoices.—Accounts of purchase, of sale, of charges, etc.—Bills of exchange.—Customs declarations.—Bills of lading.—Manifests.—Charter parties.—Deeds of partnership.—Insurance documents.

Particulars on German commerce, principally on the usages and on recent laws.

X.—ENGLISH (HIGHER SECTION).

Professor William Layton.

Three hours a week.

English commercial law.—Shipping.—Marine insurance.—Lloyd's.—Salvage patents.—Copyright.—Partnership.—Banking.—Bills of exchange.—Interest.—Discount.—Credit.—Particulars on English and American commerce.

General correspondence.

XI.—ITALIAN (HIGHER SECTION).

Professor Heinzmann Savino.

Three hours a week.

Continuation of the preceding exercises, style in general, commercial letters.—Form and words chiefly used.—Translations from the principal classical and contemporary authors : Dante, Ariosto, Tasso, etc.—Italian conversation.

XII.—SPANISH (HIGHER SECTION).

Professor V. Valle.

Three hours a week.

Continuation of the preceding exercises.—Style in general.—Mercantile letters.—Forms of speech in use.—Translations from the principal classical and contemporary authors : Gonzalo de Cordora, Conquista de Mexico, Antologia Espanola, etc.—Spanish conversation.

N.B.—The students have the option between the Italian and Spanish languages.

XIII.—DUTCH.

Professor A. Truyens.

(Optional for foreign students.)

Twice a week.

Continuation of previous exercises. On the style in general commercial technicalities, forms and correspondence, classic authors, conversation.

Third Year.*

ACCOUNTANCY AND BANKING.

Companies.—Industrial Enterprises.—Banks: Public funds.—Financial aspect of the principal countries.—Different systems of Book-keeping.

CONSTITUTIONAL LAW.

History of the Constitution of the principal countries;—principles of the Belgian Constitution;—the liberties recognised by the same.—Legislation, judicial and executive.—Chief points of the English, French, and German constitutional régimes.

ADMINISTRATIVE LAW.

Organisation and competence of Administrative Authorities.—Execution of the Law.—Deliberative Authorities.—Administration of Justice.—Armed force.—Public property, land and sea.—Industry, mines, commerce, and laws affecting the same.

COMMERCIAL AND MARITIME LEGISLATION COMPARED.

Merchants' and Commercial Acts.—Transactions under the principal legislative enactments.—Bills of Exchange, inland and foreign.—Joint Stock Companies.—Bankruptcies and failures.—Tribunals of Commerce.—Maritime law.

RIGHTS OF THE PEOPLE.

Principles.—History of the various States, of territory, of the customs of the sea, of rivers and of straits.—Absolute right, relative right of the States.—Obligations of the States during time of peace;—diplomatic agents, merchants, treaties.—History and examination of the principal treaties relative to intellectual rights (patents, trade marks, literary and artistic property, etc.).—Material interest (money, fisheries, commerce, and industry, means of communication, railways, postage, telegraphy, telephone).

CONSULAR SERVICE.

Insight into the legislations of the principal commercial countries.—Historical classification and hierarchy.—Nominations, incompatibilities, attributes in Christian and non-Christian countries.—Commercial attributes, judicial, notarial functions, civil offices, divers powers.

RIGHTS AND PREROGATIVES OF CONSULS.

Consular regulations.—Differences between States.—Pacific solutions, violent solutions; war: consequences of the declaration of war in the case of belligerents and neutrals; of the trade of the neutrals during war.—Acts; theatre and operation of the war.—Conventional relations of the belligerents.

POLITICAL ECONOMY.

Review of the lectures of the first and second years, and completion of the course.—Thorough study of special questions, economical and financial.

INDUSTRIAL AND COMMERCIAL GEOGRAPHY.

Completion of the course of the first year.—Industrial geography of Belgium, in all its details.—Economical geography of different countries.

INDUSTRIAL STATISTICS.

Of statistics, their aim, use, characters, divisions, etc.—Special study of the statistics of importation, of exportation, of transit, etc.—Movements of the ports.—Warehouse statistics and returns.—River fishing.—Special Belgian statistics, and statistics of the principal countries.

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* This programme for the Third Year's course appeared in the *Moniteur* for March 8, 1898. I am indebted to Prof. Layton for the translation of it.

INDUSTRIAL TECHNOLOGY.

Study of the principal Belgian industries.—Raw materials and their production.—Manufactured products, qualities, classification, etc.

Description of manufactured products:—

1° Extractive industries, mining industries, quarries, manufacture of coke, gas; manufacture of lime and cement.

2° Metallurgical industries; smelting of iron and steel.

3° Ceramic industries; bricks, tiles, pipes for drainage; ceramic and cement pavements, china and earthenware.

4° Glass-making; crystal, plate glass, window glass, looking-glasses. mirrors, etc.

5° Chemical industries; manufacture of sulphuric and hydrochloric acids, nitrate of soda, potash, chlorals, white lead, etc.—Paper-making.

6° Textile industries; spinning of cotton, wool, flax, hemp, jute, etc.—Manufacture (weaving and preparation) of cotton tissues, wools, linens, etc.—Manufacture of cables, ropes, cordage, etc.

7° Industries of construction, foundries, coppersmiths; construction of bridges and iron work; construction of steam engines and steam machinery, locomotives, and plant and rolling stock for railways.

8° Alimentary industries; corn trade; manufacture of sugar, beer, alcohol.

9° Divers industries; tannery and leather band-making, leather dressing, (clothing industry), hat-making, cloth weaving, boot-making, ready-made clothes, corsets, etc.

TRANSPORT.

(Continuation of the course of ship-building and armaments of the second year.)

Railways.—Rails; Stations.—Rolling stock; locomotives, tenders, carriages, goods vans and trucks.—Tariffs of the transportation of passengers and goods.—Exploitation of railways by the State, by private companies.—Steam tram lines.—Tramways.

INTERIOR NAVIGATION.

Rivers, Canals, material; canal boats, tugs, sailing boats, barges, etc.—Tariffs.

LANGUAGES.

German, Flemish, English, Spanish, Italian.—Commercial, industrial, financial and economical reports.—Drafting deeds and documents, civil and commercial.—Conversation.—Study of the principal authors, publishers, contemporary Political Economists.

Russian (lower section for second year students).—Pronunciation, reading, grammar, dictation, exercise, and composition; epistolary and commercial style, exercises, etc.

Russian (higher section in the third year).—Style in general; commercial letters; forms in use.—Translation of leading authors.

Presented by the Director, the 24th November, 1896.
(Signed) EDM. GRANDGAIGNAGE.

Examined by the Administrative Commission at its meeting on 27th November, 1896.

The Secretary, (Signed) J. DE BOM.
The Burgomaster President, (Signed) J. VAN RIJSWYCK.

Seen and approved by the Communal Administration of Antwerp, at the meeting at the Court of Aldermen, on the 12th February, 1897, in accordance with Article 18 of the Organising Regulations of 12th January, 1897.

The Secretary, (Signed) DE BRAUWERE.
The Burgomaster President, (Signed) J. VAN RIJSWYCK.

Approved.

Brussels, 17th February, 1897.

Ministry of Industry and Labour,
(Signed) A. NYSSENS.

APPENDIX IV.

SCALE OF MARKS AWARDED IN THE EXAMINATION AT THE INSTITUT SUPÉRIEUR DE COMMERCE IN ANTWERP.

I.—Entrance Examination (Fee £1).

	Written Work.	*Viva Voce.*
French Composition	10	—
Translation into English	5	—
Translation into German	5	—
Commercial Arithmetic	10	—
Book-keeping	10	—
Physical Geography	10	—
Elements of Universal History	10	—
Commercial Law	10	—
Political Economy	10	—
Elements of Algebra and Geometry	—	20
Elements of Physics and Chemistry	—	20
	80	40
	120	

⅗ of the total, or 72 marks, are necessary for admission.

II.—Intermediate Examination (Fee £2).

(*Examen de Passage.*)

	Written Work.	*Viva Voce.*
Science of Commercial Transactions	10	10
Commercial Arithmetic	5	5
Commercial and Industrial Geography	10	10
Political Economy	10	10
General Principles of Commercial Law	5	5
History and Nature of Commercial Products	10	10
French Language	5	5
Dutch	5	5
English	5	5
German	5	5
Italian or Spanish	5	5
	75	75
	150	

To pass, a student must obtain ⅗ of the total, or 90 marks.

III.—Final Examination (at End of 2nd Year) (Fee £3).

(*Examen de Sortie.*)

	Written Work.	*Viva Voce.*
Science of Commercial Transactions - - -	10	10
Commercial Arithmetic - - - - -	5	5
Commercial and Industrial Geography - - -	10	10
Political Economy and Statistics - - -	10	10
History of Commerce and Industry - - -	10	--
Comparative Study of Commercial and Maritime Law of different countries - - - -	10	10
International Law in its relation to Commerce - -	5	
Law of Tariffs - - - - - - -	5	5
History and Nature of Commercial Products - -	10	10
Naval Construction and Equipment - - -	10	
French Language - - - - -	10	5
Dutch „ - - - - - -	10	5
English „ - - - - - -	10	5
German „ - - - - - -	10	5
Spanish or Italian - - - - -	10	5
General Study of the Commercial and Industrial position of a given country (chosen by ballot from among three named a fortnight before the examination). Four hours are given for the composition of this report - - - - - -	40	—
	175	85
	260	

To pass, a student must obtain ⅔ of the total, or 156 marks.

APPENDIX V.

PROGRAMME OF THE ENTRANCE EXAMINATION AT THE INSTITUT SUPÉRIEUR DE COMMERCE, ANTWERP.

I.—Cours de langues.

1. *Langue française.* Grammaire.—Syntaxe.—Composition.—Correspondance.
2. *Langue allemande.*
3. *Langue anglaise.* } Grammaire.—Syntaxe.—Traduction. Rédaction.

N.B.—Les élèves wallons peuvent remplacer l'une des deux dernières langues par la langue néerlandaise.

II.—Tenue des livres.

Tenue des livres.—Livres principaux. Livres auxiliaires.—Factures.—Lettres de voiture.—Connaissements.—Lettres de change.—Conditions légales de l'exercise du commerce.—Subdivision des comptes généraux suivant les spécialités (commerçants, banquiers, industriels, consignataires, sociétaires).

Compte courant et d'intérêts.—Opérations sur les changes, fonds publics et matières d'or et d'argent.

III.—Géographie.

La géographie physique des cinq parties du monde.

IV.—Mathématiques.

(*a*) Arithmétique

Arithmétique élémentaire avec ses applications au commerce.

(*b*) Algèbre.

Calcul algébrique.—Equations du premier degré à une et à plusieurs inconnues.—Equations du second degré à une inconnue.—Problèmes et discussion des solutions.

(*c*) Géométrie.

La géométrie plane.—
Les quatres premiers livres de LEGENDRE *commentés par* BLANCHET.

V.—Les notions élémentaires de Physique et de Chimie.

(*a*) Physique.

Notions préliminaires.—Propriétés générales des corps.—Pesanteur.—Hydrostatique.—Poids spécifiques.—Des gaz.—Principes d'acoustique, de calorique, de lumière, de magnétisme et d'électricité.

(*b*) Chimie.

Partie inorganique.

Notions préliminaires.—Nomenclature chimique.—Théorie atomique.—Symboles et formules.—Lois des proportions définies.—Lois des proportions multiples.—Problèmes d'application.—Combinaisons.—Décompositions.—Réactions.—Lois de Berthollet.—Dissolution.—Cristallisation.—Radicaux.—Théorie des types—Métalloïdes et leurs composés.—Caractères généraux des oxydes, des sulfures, des chlorures, des brômures, des iodures, des fluorures et des oxysels.

Partie organique

Quelques notions de chimie organique.

VI.—Histoire Universelle.

Auteurs: BORGNET, *histoire ancienne.*—DES MICHELS, *histoire du moyen âge.*—TH. JUSTE, *histoire moderne.*

L'Histoire Universelle est divisée en *dix* époques, savoir:

Première Époque.—Histoire des premiers peuples de l'antiquité jusqu'au commencement de la guerre du Péloponèse. (431 *av. J. C.*)

Deuxième Époque.—Du commencement de la guerre du Péloponèse, à la Réduction de la Grèce en province Romaine. (145 *av. J. C.*)

Troisième Époque.—Du commencement de l'Histoire de Rome jusqu'à la guerre sociale exclusivement (91 *av. J. C.*)

Quatrième Époque.—De la guerre sociale à la mort d'Auguste.

Cinquième Époque.—De la mort d'Auguste à la chute de l'empire romain d'Occident. (476).

Sixième Époque.—De la chute de l'empire romain d'Occident à la mort de Charlemagne. (814).

Septième Époque.—De la mort de Charlemagne à la translation du Saint Siège à Avignon. (1309).

Huitième Époque.—De la translation du Saint-Siège à Avignon à la paix de Westphalie. (1648).

Neuvième Époque.—De la paix de Westphalie à la révolution française de 1789.

Dixième Époque.—De la révolution française à 1830.

Les époques de l'Histoire Universelle sur lesquelles porte l'examen de l'admission du mois d'Octobre sont fixées chaque année, au mois de Janvier par le Directeur de l'Institut.

VII.—Droit Commercial.

Contrats, conditions essentielles et principaux contrats. Des commerçants, livres de commerce, commissionnaires et courtiers. Lettres de change. Lettres de voiture, charte partie et connaissements. Sociétés commerciales, faillites et banqueroutes.

VIII.—Economie politique.

Notions générales d'après le traité de J. Garnier ou de E. de Laveleyee.

DISPOSITIONS RÉGLEMENTAIRES RELATIVES AUX EXAMENS D'ADMISSION.

Ces examens ont lieu par écrit et oralement.

L'examen écrit précède l'examen oral. Il a lieu à la fois pour tous les récipiendaires.

L'examen par écrit comprend :

1° Une composition en français et une traduction du français en anglais et en allemand ;

2° L'arithmétique avec ses applications au commerce et les éléments de tenue des livres ;

3° La géographie physique ;

4° Les principes de l'histoire universelle ;

5° Le droit commercial ;

6° L'economie politique.

L'examen oral comprend :

1° Les éléments de l'algèbre et de la géométrie ;

2° Les notions élémentaires de physique et de chimie.

Les récipiendaires ont six heures au moins pour leurs réponses écrites.

L'examen oral dure au moins une demi-heure pour chaque récipiendair.

Le Directeur,
Edm. Grandgaignage.

APPENDIX VI.

ORDNUNG FÜR DIE HANDELSHOCHSCHULE ZU LEIPZIG,

GENEHMIGT DURCH VERORDNUNG DES KÖNIGLICHEN MINISTERIUMS DES INNERN VOM 18. FEBRUAR 1898.

Section 1.

Wirtschaftliche Grundlage. Rechnungsjahr.

Die Handelskammer zu Leipzig begründet im Einvernehmen mit dem Akademischen Senate der Universität die Handelshochschule zu Leipzig, welche mit dem Sommersemester 1898 ins Leben treten soll. Unter Vorbehalt der endgültigen Organisation übernimmt die Handelskammer, zunächst auf die Zeit bis zum Ablaufe des zweiten Jahres, alle aus der Begründung und Führung dieser Anstalt erwachsenden finanziellen Verbindlichkeiten.

Von dem Königlichen Ministerium des Innern und von dem Rate der Stadt Leipzig sind der Handelskammer für diese beiden Jahre Zuschüsse zugesichert.

Das Rechnungsjahr läuft vom 1. April bis 31. März.

Section 2.

Zweck.

Die Handelshochschule hat den Zweck,

a) erwachsenen jungen Leuten, welche sich dem kaufmännischen Berufe (mit Einschluss des Bankwesens, des Buchhandels u. s. w.) widmen, eine vertiefte allgemeine und kaufmännische Bildung zu vermitteln,

b) angehenden Handelsschullehrern Gelegenheit zur Erlangung der erforderlichen theoretischen und praktischen Fachbildung zu geben.

Daneben soll die Anstalt praktischen Kaufleuten und Angehörigen verwandter Berufe die Möglichkeit gewähren, sich in einzelnen Zweigen des kaufmännischen Wissens und Könnens auszubilden.

Section 3.

Organisation.

Die Handelshochschule ist, so lange sie noch keine selbständige Verfassung hat, dem Königlichen Ministerium des Innern unterstellt.

Die Leitung steht dem Handelshochschulsenate zu, welcher für die ersten zwei Jahre zusammengesetzt wird aus

einem Vertreter der Königlichen Staatsregierung,
einem Vertreter der Stadt Leipzig,
dem Vorsitzenden der Handelskammer und noch zwei von dieser abzuordnenden Mitgliedern,
drei von dem Akademischen Senat abzuordnenden Professoren der Universität,
zwei von dem Vorstande der Öffentlichen Handelslehranstalt zu wählenden Lehrern dieser Anstalt,
dem anzustellenden Studiendirektor.

Den Vorsitz hat bis auf weiteres der Vorsitzende der Handelskammer zu führen.

Section 4.

Geschäftsführung.

Zur Anstellung besonderer Lehrkräfte und zu Einrichtungen, welche den Haushalt der Anstalt dauernd belasten, ist die Zustimmung der Handelskammer erforderlich. Im übrigen hat der Senat seine Geschäftsführung innerhalb der gegenwärtigen Ordnung selbständig zu regeln.

Section 5.

Studiendirektor.

Der Studiendirektor wird auf Vorschlag des Senats von der Handelskammer auf die Dauer von zwei Jahren angestellt. Ihm liegt unter

der Mitwirkung und Aufsicht des Senats die unmittelbare Leitung der Handelshochschule ob.

Mit den Professoren der Universität, deren Vorlesungen in den Studienplan der Handelshochschule einbezogen werden und mit den Lehrkräften, die sonst noch an dieser zu wirken berufen werden, hat sich der Studiendirektor jedesmal vor Beginn des Semesters ins Einvernehmen zu setzen.

Section 6.

Immatrikulationsausschuss.

Zur Erledigung der mit der Aufnahme der Studierenden verbundenen Geschäfte hat der Handelshochschulsenat aus seiner Mitte dem Studiendirektor ein Mitglied der Handelskammer und einen Professor der Universität zur Seite zu stellen, welche mit ihm den Immatrikulationsausschuss bilden.

Section 7.

Aufnahmebedingungen.

Als Studierende können an der Handelshochschule aufgenommen werden:

1. Abiturienten der höheren neunjährigen deutschen Lehranstalten (Gymnasien, Realgymnasien, Oberrealschulen);
2. Abiturienten höherer Handelsschulen, d. h. solcher, deren oberste Klasse der Oberprima der unter 1. genannten Anstalten entspricht;
3. seminaristisch gebildete Lehrer, welche die Wahlfähigkeits-(2. Lehramts-)prüfung bestanden haben;
4. Kaufleute, welche die Berechtigung zum einjährigfreiwilligen Dienst erworben und ihre Lehrzeit beendet haben, sofern sie die erforderliche geistige Reife nachzuweisen vermögen.

In welcher Weise der Nachweis der geistigen Reife in Zweifelsfällen zu führen ist, bleibt dem Ermessen des Immatrikulationsausschusses überlassen.

Ebenso hat dieser, wenn Ausländer um Aufnahme nachsuchen, darüber zu entscheiden, ob sie die genügende Vorbildung besitzen.

Section 8.

Immatrikulation.

Der Aufzunehmende hat sich durch Namensunterschrift und Handschlag den Ordnungen der Handelshochschule zu unterwerfen.

Über die erfolgte Aufnahme wird ihm eine Bescheinigung—Matrikel—ausgefertigt.

Niemand kann gleichzeitig an der Handelshochschule und an der Universität immatrikuliert sein.

Section 9.

Lehrplan.

Der Lehrplan umfasst Rechts- und Volkswirtschaftslehre, soweit sie für die allgemeine Bildung und für den kaufmännischen Beruf (mit Einschluss des Bankwesens, des Buchhandels u. s. w.) erforderlich oder nützlich sind; Handelsgeschichte, Handelsgeographie, Warenkunde und Technologie; fremde Sprachen.

Ferner finden Übungen statt im kaufmännischen Rechnen, in Buchhaltung und Korrespondenz, sowie in der Stenographie.

Denen, die sich zu Handelsschullehrern ausbilden wollen, wird ausserdem Gelegenheit zu pädagogischen Übungen in dem an die Öffentliche Handelslehranstalt anzugliedernden Seminar gegeben werden.

Section 10.

Dauer des Studiums. Prüfung.

Die Dauer des Studiums ist auf vier Semester berechnet.

Die Bildung einer staatlichen Prüfungskommission und der Erlass näherer Bestimmungen über die Prüfungen bleibt vorbehalten.

Section 11.

Gebühren und Studiengelder.

Für die Aufnahme ist eine Gebühr von 20 Mark zu entrichten.

Die Handelshochschulmatrikel giebt den Anspruch auf eine Hörerkarte der Universität. Für den Besuch der Universitätsvorlesungen und die Teilnahme an den seminaristischen Übungen der Universität sind die Kollegiengelder an die Universitätsquästur zu entrichten.

Die Honorare für die ausserhalb der Universität zu veranstaltenden Unterweisungen und Übungen in den kaufmännischen Fertigkeiten, in fremden Sprachen u. s. w. werden vom Senat festgestellt und bekannt gemacht; sie sollen die an deutschen Universitäten üblichen Sätze nicht übersteigen. Die Honorare sind beim Beginn des Semesters an die Kasse der Handelskammer zu entrichten.

Section 12.

Hörer.

Die Studierenden der Universität Leipzig sind berechtigt, an den ausserhalb der Universität zu veranstaltenden Unterweisungen und Übungen sowie an dem pädagogischen Seminar der Handelshochschule als Hörer gegen Lösung einer Hörerkarte und Entrichtung der festgesetzten Honorare teilzunehmen.

Unter welchen Bedingungen sonst die Zulassung als Hörer gewährt werden kann, bestimmt der Senat.

Section 13.

Ferien.

Die Ferien fallen im allgemeinen mit denen der Universität zusammen. Das Wintersemester beginnt jedoch für die kaufmännischen Übungen einschliesslich der Unterweisung in fremden Sprachen mit dem 1. Oktober, und bereits in der letzten Septemberwoche werden Führungen in industriellen Betrieben und ähnliche Veranstaltungen stattfinden.

Section 14.

Aufsicht.

Die Studierenden der Handelshochschule sind der Aufsicht des Senats unterstellt. Der Senat kann die ihm in dieser Hinsicht zustehenden Befugnisse dem Studiendirektor oder einem besonderen Ausschuss übertragen.

Section 15.

Disziplinarstrafen.

Als Disziplinarstrafen sind zulässig: Verweis; Geldsstrafen bis zur Höhe von 50 Mark; Nichtanrechnung des laufenden Semesters; Androhung der Entlassung; Entlassung; Relegation, diese jedoch nur wegen ehrlosen Betragens.

Gegen die zuletzt erwähnten drei Strafarten kann binnen einer Woche Berufung an das Königliche Ministerium des Innern eingelegt werden.

Section 16.

Übergangsbestimmungen.

Zur Vorbereitung der Thätigkeit der Handelshochschule ist der Senat alsbald nach Genehmigung der gegenwärtigen Ordnung ins Leben zu rufen.

Leipzig, den 12. Februar 1898.

Die Handelskammer.

Zweiniger, Vorsitzender.

Dr. Gensel, I. Sekretär.

Das Königliche Ministerium des Innern hat die vorstehende Ordnung unter dem 18. Februar 1898 genehmigt.

Immatrikulationsordnung der Handelshochschule zu Leipzig.

Section 1.

Immatrikulationsausschuss.

Wer Studierender der Handelshochschule werden will, bedarf der Immatrikulation, über deren Zulässigkeit der Studiendirektor und in zweifelhaften Fällen der Immatrikulationsausschuss entscheidet. Dieser besteht aus dem Studiendirektor als Vorsitzendem, einem Mitgliede der Handelskammer und einem Professor der Universität. Letztere beiden wählt der Handelshochschulsenat auf zwei Jahre. Überdies ist diesem Ausschusse der zum Handelshochschulsenat abgeordnete Vertreter der Königlichen Staatsregierung beigetreten.

Section 2.

Anmeldung zur Immatrikulation.

Wer die Immatrikulation erlangen will, hat sich zunächst unter Vorlegung der erforderlichen Zeugnisse bei dem Studiendirektor persönlich anzumelden.

Dieser stellt dem zu Immatrikulierenden, wenn ein Bedenken nicht obwaltet, eine bei der Immatrikulation vorzuweisende Bescheinigung darüber aus, dass die vorgelegten Zeugnisse geprüft und für die Zulassung zur Immatrikulation genügend befunden worden sind.

Section 3.

Anmeldungsfrist.

Die Anmeldungen zur Immatrikulation haben innerhalb vier Wochen von dem öffentlich bekannt gemachten Termin an zu erfolgen. Über die Zulässigkeit einer späteren Anmeldung steht dem Studiendirektor, bez. dem Immatrikulationsausschusse die Entscheidung zu.

Section 4.

Die Immatrikulation. Gebühren.

Die Immatrikulation wird dadurch bewirkt, dass der Aufzunehmende sich eigenhändig in das Stammbuch der Handelshochschule einzeichnet und, nachdem er durch Handschlag dem Senate und den Satzungen der Handelshochschule Gehorsam versprochen hat, von dem Studiendirektor unter die Zahl der Studierenden der Handelshochschule aufgenommen wird.

Nach so vollzogener Immatrikulation erhält der Studierende eingehändigt:

1) die Matrikel,
2) eine Legitimationskarte, mit Angabe des Vor- und Zunamens des Studierenden, seines Geburtsortes und seiner Wohnung,
3) ein Kollegienbuch und
4) einen Hörerschein für die Vorlesungen an der Universität.

Die Gebühren betragen für die Immatrikulation 20 Mark und für den halbjährigen Hörerschein der Universität 3 Mark.

Section 5.

Aufnahmebedingungen.

Als Studierende der Handelshochschule können aufgenommen werden

1) Abiturienten der höheren deutschen Lehranstalten mit neunjährigem Kursus (Gymnasien, Realgymnasien, Ober-Realschulen);
2) Abiturienten höherer Handelsschulen, d. h. solcher, deren oberste Klasse der Oberprima der unter 1) genannten Anstalten entspricht;
3) seminaristisch gebildete Lehrer, welche die Wahlfähigkeits- (2. Lehramts-) prüfung bestanden haben;

4) Kaufleute, welche die Berechtigung zum einjährig-freiwilligen Dienst erworben und ihre Lehrzeit beendet haben, sofern sie die erforderliche geistige Reife nachzuweisen vermögen.

In welcher Weise das letztere bewirkt wird, bleibt im Zweifelsfalle dem Ermessen des Immatrikulationsausschusses überlassen.

Ebenso hat dieser, wenn Ausländer um Aufnahme nachsuchen, darüber zu entscheiden, ob sie die genügende Vorbildung besitzen.

Section 6.

Hörer.

Personen reiferen Alters, welche aus irgend einem Grunde als Studierende der Handelshochschule nicht immatrikuliert werden, können von dem Studiendirektor als Hörer zugelassen werden. Für den halbjährigen Hörerschein ist eine Gebühr von 3 Mark zu entrichten. Dieser Schein berechtigt nicht zu dem Besuch der an der Universität gehaltenen Vorlesungen, wofür bei dieser ein besonderer Hörerschein nachzusuchen ist.

Section 7.

Dauer und Erlöschen der Eigenschaft als Studierender der Handelshochschule.

Die Eigenschaft als Studierender erlischt:

a) durch freiwilligen Abgang von der Handelshochschule,
b) nach 3 Jahren,
c) durch die von dem Handelshochschulsenat verfügte Exmatrikulation, insbes. für diejenigen, welche sich ohne Genehmigung ein ganzes Semester hindurch von der Handelshochschule entfernt, oder welche in einem Studiensemester keine Vorlesung oder Übung belegt, oder welche wiederholten Aufforderungen zur Regelung ihrer Honorarverpflichtungen nicht Folge geleistet, order welche auf Vorladung unter Androhung der Exmatrikulation sich nicht gestellt haben,
d) durch Entlassung oder Relegation.

Section 8.

Abgangszeugnis.

Jeder Studierende, welcher die Handelshochschule freiwillig verlässt, erhält vom Studiendirektor ein Abgangszeugnis, welches den Namen und den Geburtsort des Studierenden, den Tag seiner Immatrikulation, die Zeit seines Aufenthaltes auf der Handelshochschule, die Vorlesungen und Übungen, welche er belegt hat, und Auskunft über seine sittliche Aufführung enthalten muss.

Dem Antrage auf Ausfertigung des Abgangszeugnisses sind beizufügen:

a) das Kollegienbuch, in welchem die Annahme der Vorlesungen und Übungen von den betreffenden Dozenten bescheinigt sein muss,
b) die Matrikel,
c) die Legitimationskarte,
d) eine Bescheinigung der Universitäts- und Handelskammer-bibliothek, dass der betreffende Studierende nicht im Besitz dort entliehener Bücher ist.

Leipzig, den 18. April 1898.

Der Senat der Handelshochschule
gez. Zweiniger.

APPENDIX VII.

REGULATIONS FOR THE AWARD OF THE TRAVELLING COMMERCIAL SCHOLARSHIPS GIVEN BY THE FRENCH MINISTRY OF COMMERCE AND INDUSTRY.

(Bureau de l'Enseignement Commercial.)

1897.

[NOTE.—These Travelling Scholarships are of two classes :—

(*a*) For youths from 16 to 18 years of age, tenable for two years, and of the value of £160 for the first year and of £120 for the second.

(*b*) For young men of 26 years of age and upwards who have completed their studies at a Higher School of Commerce. These are tenable for two years but may be renewed for a third year. Their value, if held in Europe, Algeria, or Tunis, is £100 for the first and £80 for the second and third year ; or, if held in any other country, £150 for the first year, £120 for the second, and £80 for the third.

Thus the second class of Scholarships alone concerns the grade of Higher Commercial Education to which the present paper is specially devoted. But as the regulations are in some respects common for the two classes of Scholarships offered by the French Board of Trade, the whole document is reproduced here.]

MINISTÈRE DU COMMERCE, DE L'INDUSTRIE, DES POSTES ET DES TÉLÉGRAPHES.

DIRECTION DU PERSONNEL ET DE L'ENSEIGNEMENT TECHNIQUE.

BUREAU DE L'ENSEIGNEMENT COMMERCIAL.

RÈGLEMENT

RELATIF

AUX

BOURSES COMMERCIALES

DE SÉJOUR À L'ÉTRANGER.

(Arrêtés des 6 décembre 1890 et 20 février 1895.) *

ARTICLE PREMIER. Les bourses commerciales de séjour à l'étranger mises au concours par le Ministère du commerce, de l'industrie, des postes et des télégraphes, sont divisées en deux catégories, suivant l'âge exigé des concurrents.

DISPOSITIONS SPÉCIALES AUX BOURSES DE LA PREMIÈRE CATEGORIE.

ART. 2. Les bourses de la première catégorie sont réservées aux jeunes gens âgés de seize ans au moins et de dix-huit ans au plus, au 1er juillet de l'année du concours, qui désirent aller s'établir dans les pays hors d'Europe.

* L'arrêté du 20 février 1895 a modifié les articles 5, 6, 12, 13 et 20 de l'arrêté du 6 décembre 1890.

ART. 3. Ces bourses sont attribuées pour deux ans : leur valeur est fixée à 4,000 francs pour la première année et à 3,000 francs pour la seconde. Les frais de voyage restent à la charge des intéressés.

Ces bourses peuvent être renouvelées pour une troisième année, à raison de 3,000 francs, si les boursiers méritent cette faveur par leurs rapports et leurs travaux. Le renouvellement est accordé, dans ce cas, par décision ministérielle, après avis de la Commission visée à l'article 25.

ART. 4. Les candidats à ces bourses doivent produire, outre les pièces visées à l'article 11° : 1° un certificat médical dûment légalisé, constatant qu'ils sont en état de supporter les fatigues du voyage et du changement de climat ; 2° un certificat du directeur du dernier établissement dans lequel ils ont poursuivi leurs études, constatant la durée et la nature de ces études.

ART. 5. Outre les points spécifiés aux articles 15 et 18, les candidats peuvent obtenir : 1° une majoration de 10 p. 100 des points obtenus par eux au concours, s'ils justifient de deux ans d'études au moins dans une école pratique de commerce, dans une école primaire supérieure professionnelle régie par le décret du 17 mars 1888, ou à l'école commerciale de Paris, ou bien s'ils justifient d'une année d'études dans un cours préparatoire d'une école supérieure de commerce reconnue par l'État ; 2° une majoration de 5 p. 100 s'ils ont été employés au moins un an dans une affaire industrielle ou commerciale et s'ils en justifient par une attestation jugée satisfaisante.

DISPOSITIONS SPÉCIALES AUX BOURSES DE LA SECONDE CATÉGORIE.

ART. 6. Les bourses de la seconde catégorie sont réservées aux jeunes gens âgés de vingt-six ans au plus au 1er juillet de l'année du concours et pourvus du diplôme supérieur ou du certificat de fin d'études d'une école supérieure de commerce reconnue par l'Etat, qui désirent s'établir ou faire un apprentissage commercial dans un pays d'Europe ou hors d'Europe.

ART. 7. Ces bourses sont attribuées pour deux ans et peuvent être renouvelées pour une troisième année, dans les conditions déterminées à l'article 3.

Leur valeur est fixée à 2,500 francs pour la première année et à 2,000 francs pour la seconde et, s'il y a lieu, la troisième année en ce qui concerne les boursiers auxquels est assignée une résidence dans un pays d'Europe, en Algérie ou en Tunisie.

Elle est fixée à 4,000 francs pour la première année, à 3,000 fr. pour la seconde, et, s'il y a lieu, à 2,000 francs pour la troisième année en ce qui concerne les boursiers auxquels est assignée une résidence en tout autre pays.

Les frais de voyage restent à la charge des intéressés.

ART. 8. Les candidats à ces bourses doivent produire, outre les pièces visées à l'article 11 : 1° le diplôme supérieur ou le certificat de fin d'études d'une école supérieure de commerce reconnue par l'État ; 2° une pièce constatant qu'ils sont libérés de tout service militaire actif.

ART. 9. Outre les points spécifiés aux articles 15 et 18, les candidats peuvent obtenir : 1° une majoration de 10 p. 100 des points obtenus par eux au concours, s'ils ont obtenu, à la suite de leurs études à l'école supérieure de commerce, une moyenne finale de 16 au moins ; 2° une majoration de 5 p. 100, si, après leur sortie de l'école, ils ont passé au moins une année dans les affaires et s'ils en justifient par une attestation jugée satisfaisante ; 3° une majoration de 10 p. 100 si, dans les mêmes conditions, ils ont passé au moins deux ans dans les affaires.

DISPOSITIONS COMMUNES AUX DEUX CATÉGORIES DE BOURSES.

ART. 10. Tous les ans, avant le 1er mars, un arrêté ministériel inséré au *Journal officiel* fixe le nombre de bourses mises au concours, pour chaque catégorie.

ART. 11. Les candidats doivent adresser à la préfecture du département de leur domicile, du 1er au 31 juillet, leur demande accompagnée des pièces ci-après :

1° Pièces authentiques justifiant qu'ils sont de nationalité française et qu'ils ont l'âge déterminé par l'article 2 ou l'article 6 du présent règlement ;

2° Certificat de bonne vie et mœurs.

3° Certificat délivré par le maire de la commune du domicile des parents et constatant la situation de fortune de ces derniers ;

4° Note écrite et signée par le candidat, relatant ses études et occupations antérieures ;

5° Demande indiquant la langue étrangère pour laquelle le candidat désire subir les épreuves écrites (anglais, allemand, espagnol ou portugais), et, s'il y a lieu, les autres langues étrangères pour lesquelles il désire subir des épreuves orales complémentaires (anglais, allemand, espagnol, portugais, italien, langues orientales vivantes).

Les candidats doivent en même temps, suivant qu'ils prétendent aux bourses de la première ou de la seconde catégorie, produire les pièces spéciales visées à l'article 4 ou à l'article 8.

Ils doivent également produire, s'il y a lieu, les pièces justifiant qu'ils se trouvent dans les conditions mentionnées aux articles 5 et 9.

ART. 12. Le préfet instruit les demandes qui lui sont adressées et transmet les dossiers au Ministre, avec son avis motivé, avant le 1er septembre.

Le Ministre arrête, pour chaque catégorie de bourses, la liste des candidats qui, en raison de leur situation de famille, sont admis à prendre part au concours.

Les intéressés sont avisés de la décision ministérielle par l'entremise du préfet.

ART. 13. Les épreuves écrites ont lieu dans chaque préfecture, au mois d'octobre, sous la surveillance d'une Commission de trois membres nommée par le préfet.

Ces épreuves comprennent, pour chaque catégorie de candidats :

1° Une composition de géographie commerciale :

2° Une composition de législation ;

3° Une composition d'arithmétique commerciale ;

4° Une composition de langue étrangère (thème, version et correspondance).

Les sujets de ces compositions sont envoyés sous plis cachetés aux préfectures par l'Administration.

Ils sont tirés du programme d'examen oral spécial à chaque catégorie de bourses.

ART. 14. Les compositions sont parafées par le président de la Commission et immédiatement adressées au Ministère, sous plis cachetés.

Elles sont soumises à un jury spécial nommé par décision ministériel.

ART. 15. Chaque composition est appréciée par une note variant de 0 à 20. La valeur relative des diverses compositions est traduite par les coefficients ci-après :

Géographie commerciale		4
Législation		4
Arithmétique commerciale		4
Langue étrangère.	Thème	1
	Version	1
	Correspondance	2
	Total	15

Les candidats n'ayant point obtenu au moins la moitié du maximum des points, soit 150 points, ou n'ayant point obtenu, pour une composition, au moins le quart des points afférents à cette composition, ne sont point admissibles aux épreuves orales.

ART 16. La liste des candidats admissibles aux épreuves orales est établie par le jury et arrêtée par le Ministre.
Les intéressés sont invités, au moins huit jours à l'avance, à venir subir les épreuves au Ministère.

ART. 17. Les épreuves orales comprennent :

1° Une interrogation sur la géographie commerciale ;

2° Une interrogation sur la législation ;

3° Une interrogation sur l'arithmétique commerciale ;

4° Une traduction, à livre ouvert, et une conversation en langue étrangère.

Le programme des épreuves est établi distinctement pour chaque catégorie de bourses ; il est approuvé par décision ministérielle, après avis de la Commission permanente, et publié chaque année au *Journal officiel* en même temps que l'arrêté fixant le nombre de bourses mises au concours.

ART. 18. Les diverses interrogations sont appréciées par des notes variant de 0 à 20, et comportent respectivement les mêmes coefficients que les compositions écrites correspondantes.
Les candidats qui, en dehors des interrogations sur la langue étrangère qu'ils ont indiquée pour la composition écrite, subissent une épreuve orale spéciale sur d'autres langues étrangères, peuvent obtenir, pour chacune de ces épreuves complémentaires, une note dont le coefficient est 2. Toutefois celles de ces épreuves pour lesquelles le candidat n'obtient qu'une note inférieure à 8 sont considérées comme nulles.

ART. 19. Les candidats de chaque catégorie sont classés par ordre de mérite, d'après le nombre total de points obtenus aux épreuves écrites et aux épreuves orales et des points résultant des majorations spécifiées aux articles 5 et 9.
Les listes de classement sont dressées par le jury ; le Ministre arrête ces listes et attribue les bourses mises au concours ; il asigne une résidence à chaque boursier au vu de la demande de l'intéressé et de l'avis motivé du jury.

ART. 20. A moins de maladie ou de cas de force majeure dûment constatés, les boursiers doivent se mettre en route pour la résidence qui leur est assignée avant le 20 décembre de l'année du concours.

ART. 21. En arrivant à leur résidence, ils doivent faire constater leur arrivée au consulat de France. Ils restent, pendant toute la durée de la bourse, sous la surveillance du consul et doivent obtenir de lui un certificat trimestriel constatant qu'ils s'occupent sérieusement d'études et d'affaires commerciales.

ART. 22. Ils ne peuvent quitter la ville qui leur est assignée comme résidence sans une autorisation préalable du Ministre. Ils peuvent toutefois, sur autorisation spéciale du consul de France, s'éloigner de cette résidence, pourvu qu'ils ne quittent point le pays et que leurs absences n'excèdent point un mois.

ART. 23. A partir de leur arrivée dans leur résidence, les boursiers doivent adresser au Ministre du commerce : 1° le dernier jour de chaque mois, une note détaillée sur les études qu'ils ont poursuivies et les occupations auxquelles ils se sont livrés pendant le mois ; 2° à la fin de chaque trimestre, un rapport détaillé sur l'une des industries spéciales de la place ou sur la situation commerciale du marché, notamment au point de vue des débouchés ouverts ou susceptibles d'être ouverts au commerce français.

ART. 24. Peuvent être privés du bénéfice de la bourse, même en cours d'année : les boursiers dont l'attitude ou la conduite donnerait lieu à des plaintes, soit de la part du consul de France, soit de la part des autorités locales ; ceux qui se rendraient coupables d'actes entachant leur honorabilité ; ceux qui s'absenteraient de leur résidence en dehors des cas visés à

l'article 22 ; ceux qui n'adresseraient point régulièrement les notes et rapports prévus par l'article 23 ou qui n'adresseraient que des notes ou rapports jugés insuffisants.

La déchéance ne peut être prononcée par le Ministre qu'après enquête, l'intéressé ayant produit ses moyens de défense ou ayant été mis en demeure de les produire, et après avis de la Commission mentionée à l'article suivant.

ART. 25. La Commission spéciale chargée d'examiner annuellement les rapports des boursiers et de donner son avis sur les renouvellements et déchéances de bourses est composée de la manière suivante :

Le directeur du Personnel et de l'enseignement technique, *président ;*

L'inspecteur général des écoles d'arts et métiers et de l'enseignement technique ;

Deux membres de la Commission permanente du Conseil supérieur de l'enseignement technique ;

Deux inspecteurs régionaux de l'enseignement commercial ;

Le chef du bureau de l'enseignement commercial, *secrétaire*

PROGRAMMES.

I

Programme des connaissances exigées des candidats aux bourses de la première catégorie.

(Jeunes gens de seize à dix-huit ans.)

GÉOGRAPHIE.

Division de la surface du globe en terres, en eaux. Continents, mers principales.

Asie, Afrique, Amérique, Europe, Océanie.

Principaux États, étendue et limites ; montagnes, fleuves, population, capitale, gouvernements ; colonies européennes de l'Asie, de l'Afrique, de l'Amérique, de l'Océanie.

Principales productions agricoles, minérales et industrielles.

Principaux ports de commerce.

Grandes voies de terre et de mer.

Grandes lignes télégraphiques.

Étude détaillée de la France. Configuration et limites. Etendue. Mers. Description des côtes ; principaux ports ; principaux services maritimes ; points de départ ; escales ; points d'arrivée.

Montagnes, fleuves et affluents.

Formation territoriale de la France ; anciennes provinces ; departements ; chefs-lieux ; villes principales.

Pouvoirs public ; organisation des grands services de l'État.

Algérie et colonies françaises ; pays de protectorat. Description physique. Administration. Villes principales. Relations commerciales avec la métropole.

LÉGISLATION.

Des actes de commerce et des commerçants. Capacité, droits et devoirs spéciaux des commerçants. Sociétés commerciales. Contrats commerciaux : vente, opérations à terme, gage, magasins généraux, warrants ; commission ; transports, règles spéciales aux transports par chemins de fer. Bourses de commerce, agents de change, négociations au comptant et à terme, courtage de marchandises. Contrats maritimes : notions sur la propriété des navires, les armateurs, les captaines : affrètement ; assurances maritimes ; prêt à la grosse ; hypothèque maritime ; ventes maritimes. Faillite et liquidation judiciaire ; banqueroute. Juridiction commerciale, tribunaux de commerce, conseils de prud'hommes. Conseil supérieur

du commerce et de l'industrie, chambres de commerce, chambres consultatives des arts et manufactures. Notions élémentaires de droit industriel : brevets d'invention, dessins et modèles de fabrique, marques de fabrique et de commerce, nom commercial, concurrence déloyale. Notions élémentaires de législation douanière.

ARITHMÉTIQUE.

Exercices de calcul rapide sur l'addition et la soustraction.

Principes et règles de la multiplication des nombres entiers et décimaux.

Exercices de multiplication rapide par 5, 9, 10, 11, 15, 25 et par leurs multiples et sous-multiples.

Application des procédés de calcul rapide à des opérations commerciales diverses.

Principes et règles de la division des nombres entiers et decimaux. Abréviation de la division. Division par un nombre d'un seul chiffre, par un produit de facteurs d'un seul chiffre, par 25, 75, 125 et leurs multiples ou sous-multiples.

Applications aux questions commerciales.

Propriétés des nombres.

Caractéres de divisibilité.

Preuve par 9 et par 11 des diverses opérations.

Nombres premiers et nombres premiers entre eux.

Du plus petit multiple commun et du plus grand diviseur commun à des nombres donnés.

Théorie des fractions ordinaires. Applications à diverses questions industrielles et commerciales.

Transformations diverses de fractions. Réduction des fractions au même dénominateur.

Opérations sur les fractions. Conversion des fractions décimales en fractions ordinaires et réciproquement.

Carré et racine carrée. Cube et racine cubique.

Système métrique.

Étude sommaire du système des poids et mesures des divers États.

Grandeurs proportionnelles.

Calculs d'intérêts et d'escompte.

II

Programme des connaissances exigées des candidats aux bourses de la seconde catégorie.

(*Anciens élèves des Écoles supérieures de commerce.*)

GÉOGRAPHIE.

France.

Géographie agricole. Divisions agricoles. Les terres arables. Végétaux dont on extrait les boissons. Arbres à fruits proprement dits. Forêts. Cultures industrielles. Prairies et pâturages. Institutions politiques et administratives relatives à l'agriculture.

Géographie industrielle. Industries extractives. Industries mécaniques. Industries chimiques. Industries textiles. Institutions politiques et administratives relatives à l'industrie.

Géographie commerciale proprement dite. Voies de communication : routes de terre, canaux, chemins de fer, postes, lignes télégraphiques. Ports de commerce. Commerce extérieur. Institutions politiques et administratives relatives au commerce. Régime douanier. Traités de commerce.

Europe.

Îles Britanniques. Belgique. Pays-Bas. États scandinaves. Suisse. Allemagne, Alsace-Lorraine. Autriche-Hongrie. Russie. États danubiens et Péninsule des Balkans. Grèce. Italie. Espagne. Portugal.

Situation historique, politique et économique de chaque pays

Climat, aspect et nature du sol, à l'intérieur et sur le littoral.
Populations, races, religions.
Productions naturelles des trois règnes.
Voies et moyens de communication : routes de terre, fleuves et rivières navigables, canaux intérieurs, chemins de fer, postes, télégraphes, canaux et lignes maritimes.
Marchés ou principaux lieux d'échange.
Commerce extérieur de chaque pays et, principalement, commerce de ces pays avec la France.

Afrique.

Notions générales.
Les États barbaresques, Tripoli, Maroc.
Le Sahara.
Les îles de l'océan Atlantique.
La côte de Sénégambie et le golfe de Guinée.
Les régions du Niger, du Haoussa et du lac Tchad.
L'Afrique australe. Les îles du golfe de Guinée. L'État independant du Congo. Le cap Natal. La république Sud-Africaine. L'Ltat libre d'Orange. Les îles de l'océan Indien. Les possessions portugaises. Les possessions allemandes. Zanzibar. La région des Grands-Lacs.
La côte des Somalis et des Danakils.
Le pays des Gallas. L'Abyssinie.
La vallée du Nil. L'Égypte. Le canal de Suez.

Asie.

Notions générales. Climats. Productions. Races. Religions. Grandes voies de communication. Grandes divisions politiques.
L'Asie occidentale. Turquie d'Asie. Arabie. Perse. Afghanistan Belouchistan.
Les possessions russes. La Caucasie. L'Asie centrale. La Sibérie.
Les possessions anglaises. L'Hindoustan.
L'Indo-Chine et la presqu'île de Malacca. Le Burmah anglais et la Birmanie. Les *straits settlements*. Siam.
L'Extrême-Orient. L'Empire chinois. La Corée. Le Japon.

Océanie.

Notions générales.
La Malaisie. Les possessions hollandaises. Les possessions espagnoles. Les possessions anglaises. Australie. Nouvelle-Zélande. Iles Fidji. Les possessions allemandes.
Les archipels indépendants. Les îles Havaï.

Amérique.

Notions générales.
L'Amérique du Nord. Les terres arctiques et le pôle Nord. Terre-Neuve. Le Dominion of Canada. Les Bermudes. Les Etats-Unis.
Le Mexique. Les Antilles. L'Amérique centrale et le canal de Panama.
L'Amérique du Sud. Historique de l'indépendance des colonies espagnoles.
La Nouvelle-Grenade. Le Vénézuela et l'Équateur. Le Perou. La Bolivie. Le Chili. Le Brésil. Les Guyanes. La République Argentine L'Uruguay. Le Paraguay.

Colonies françaises.

Étude spéciale des colonies françaises.
La France dans l'Afrique du Nord.
Colonies Afrique, d'Amérique, d'Asie et d'Océanie.
Du système colonial français
Régime financier, régime administratif.
Étude sommaire du système colonial anglais

LÉGISLATION.

Droit commercial.—Actes de commerce. Intérêt à les distinguer (compétence, preuve, etc.).

Commerçants.—Obligations et droits: livres de commerce, publicité du contrat de mariage, patentes élections et éligibilité aux tribunaux et chambres de commerce.

Des sociétés.—Notions générales: sociétés civiles et sociétés commerciales. Sociétés en nom collectif et en commandite simple. Sociétés par actions. Généralités sur les actions et les obligations, les titres nominatifs et les titres au porteur. Commandites par actions. Sociétés anonymes. Sociétés à capital variable (sociétés coopératives). Associations en participation. Sociétés civiles à formes commerciales. Sociétés étrangères.

Des intermédiares employés par les commerçants. Préposés ou commis. Commissionnaires et mandataires. Courtiers.

De la vent commerciale. Règles générales sur sa conclusion et ses effets. Différentes espèces.

Du gage.—Gage civil et gage commercial. Règles spéciales au gage commercial. Des magasins généraux, des warrants et des récépissés.

Du contrat de transport.—Règles générales. Du transport par chemin de fer.

Bourses de commerce. Opérations qui s'y font. Agents de change et courtiers.

Des effets du commerce.

De la lettre de change. Son histoire De la forme de la lettre de change. De l'endossement, de ses formes et de ses effets. De la provision. D l'acceptation. Des droits et des devoirs du porteur.

Des chèques. Difficultés sur la distinction entre les chèques et les lettres de change. Législation anglaise. *Clearing-houses* de Londres et des Etats-Unis. Chambre de compensation de Paris

Des billets à ordre.—Différence avec les lettres de change. Billets à domicile.

Du recouvrement des effets de commerce par l'administration des postes en France, en Allemagne et en Belgique.

Billets au porteur.

Opérations de banque.—Prêt. Escompte, Ouverture de crédit. Compte courant. De la Banque de France, des banques coloniales, du Crédit foncier.

Faillites et banqueroutes. Cessation des payements et jugement déclaratif. Effets. Du juge-commissaire et des syndics. Solution de la faillite. Concordat simple ou par abandon d'actif. Clôture pour insuffisance d'actif. Union. Banqueroutes simples et frauduleuses.

Juridictions commerciales.

Tribunaux de commerce. Organisation, compétence, procédure.

Conseils de prud'hommes. Caractère spécial de leurs attributions; élection des prud'hommes.

Appendice. Chambres de commerce. Chambres consultatives des arts et manufactures. Conseil supérieur du commerce et de l'industrie.

Droit maritime.—Notions générales. Sources du droit maritime.

Des navires. Propriétaires et armateurs. Droits des divers créanciers: privilèges, hypothèques, droit de suite.

Affrètement ou nolisement. De la distinction des avaries communes et des avaries particulières. Du règlement d'avaries communes.

Du prêt à la grosse.

Assurances maritimes. Notions générales. Règles particulières à l'assurance sur corps et à l'assurance sur facultés.

Appendice. Notions générales sur les assurances contre l'incendie, les accidents, et sur les assurances sur la vie.

Droit industriel.—Des brevets d'invention. De la nature du droit consacré au profit de l'inventeur. Du brevet d'invention. Des objets du droit d'invention. Des conditions du droit. Cas de nullité. Cas de déchéance.

De la durée de la taxe des brevets. Du perfectionnement. De l'importation de l'invention brevetée à l'étranger. Du droit des étrangers. De la protection provisoire pendant les expositions publiques.

De la propriété de l'invention et du brevet. Des droits résultant du brevet. Des divers droits dont le brevet peut être l'objet.
De la cession et de la transmission des brevets.
De la contrefaçon.
De la juridiction et des actions. Action en nullité. Action de déchéance. Action relative à la propriété des brevets. Action en contrefaçon. Pro cédure. Répression. Législations étrangères. Droit comparé.
Des secrets de fabrique.
Des modèles et dessins de fabrique.
Notions générales sur la propriété artistique.
Des marques de fabrique et de commerce. Caractères des marques. Propriété. Transmission. Dépôt. Contrefaçon. Répression. Lois étrangères.
Du nom commercial.
De la concurrence déloyale.

Législation douanière.—Transformations successives de la législation douanière jusqu'à nos jours. Régime actuel. Le tarif général français. Les principaux tarifs étrangers. Traités de commerce en vigueur.
L'administration des douanes. Droits fiscaux. Droits protecteurs. Théorie des droits compensateurs.
Tarif général et tarif conventionnel. Clause de la nation la plus favorisée.
Mode de taxation. Droits spécifiques. Droits *ad valorem*. Drawbacks. Admissions temporaires. Primes d'exportation.
Division des droits de douane. Droits à l'importation. Droits à l'exportation. Droits de transit. Droits accessoires perçus par l'administration des douanes.
Mesures de police et de garantie contre la fraude. Service actif des douanes. Rayon frontière de terre et de mer. Indication de la procédure et des voies de recours en matière de contentieux douanier. Droits de préemption.
Commerce général. Commerce spécial.
Régimes spéciaux. Régimes des colonies.
Législation douanière des principales industries. Commerce des grains. Industries extractives et manufacturières. Les sucres. Impôt sur le sel Pêches maritimes, etc.
Marine marchande. Droits différentiels. Surtaxes de pavillon. Surtaxes d'entrepôt.
Primes de navigation et d'armement. Primes à la construction.
Politique commerciale et tarifs douaniers des principaux États.

ARITHMÉTIQUE.

Intérêt simple. Résolution des problèmes d'intérêt simple.
Méthodes des nombres et des diviseurs.
Méthode des parties aliquotes du taux.
Méthode des parties aliquotes du temps.
Méthode des parties aliquotes du capital.
Escompte. Escompte en dedans ou rationnel. Escompte commercial ou en dehors. Usages de banque. Commissions.
Résolution et discussion des différents problèmes sur l'escompte.
Billets équivalents. Echéance moyenne. Comparaison des résultats donnés par les deux méthodes d'escompte.
Escompte de la Banque de France.
Comptes courant. Définition et principes de l'établissement d'un compte courante. Examen des trois méthodes : 1° directe ; 2° indirecte ou rétro grade ; 3° hambourgeoise ou à échelle.
Opérations de bourse. Modes d'emprunt des gouvernements. Souscrip tions nationales. Rentes sur l'État. Grand-livre de la dette publique Dette flottante et dette consolidée. Bons du Trésor. Budget. Amortisse-ment. Conversions. Actions. Obligations de chemins de fer et autres sociétés. Action de jouissance.
Bourses. Bourse de Paris.
Opérations au comptant

Marchés à terme ferme. Escompte. Marchés à terme et à prime. Réponse des primes. Liquidation. Report ou déport du comptant. Report d'une liquidation à une autre.

Combinaisons diverses des opérations à terme ferme et des opérations à terme et à prime.

Echelle de primes.

Bourses de commerce. Affaires qui se traitent à la bourse de Paris.

Change et arbitrage.—Lettres de change, change intérieur, change extérieur, chèques, versements.

Papier long et papier court, escompte, cote des changes.

Places qui donnent le certain et places qui donnent l'incertain.

Explication de la cote des changes de Paris et des cotes des places cambistes étrangères.

Définition des arbitrages.

Arbitrages directs et arbitrages indirects.

Explication et application de la règle dite conjointe ou chaîne.

Arbitrage des matières métalliques, principalement entre les places de Londres et de Paris.

Arbitrage sur fonds publics. Reports.

Intérêts composés. Formule fondamentale.

Solutions générales des problèmes d'intérêt composé. Calculs pratiques. Usage des tables de logarithmes et des tables numériques de Violeine, Pereire, etc.

Recherche du temps nécessaire pour doubler, tripler, etc., un capital placé à intérêts composés.

Valeur actuelle d'un capital payable à terme. Escompte. Divers modes d'escompte. Comparaison et discussion. Echéance moyenne de plusiers capitaux payables à différentes dates en tenant compte des intérêts composés.

APPENDIX VIII.

SELECT BIBLIOGRAPHY.

This list does not aim at being in any sense exhaustive. It is confined to the chief books and papers which will be found useful for reference at the present time. A fuller bibliography will be found in No. 3 below (pp. 220 *seq.*).

All the books named in the following list can be consulted at the Library of the Education Department, Cannon Row, Whitehall, S.W.

1. L'Enseignement commercial et les Écoles de Commerce en France et dans le monde entier; par Eugène Léautey. Paris: Librairie Comptable et Administrative, 2 Cité Rougemont. No date. Large 8vo., iv., pp. 774. Indispensable. The best recent book on the subject.

2. Kaufmännisches Fortbildungs-Schulwesen. II. Der gegenwartige Stand. von Dr. Stegemann. (Braunschweig: A. Limbach. 1896. Large 8vo., pp. 436.) Useful, especially for Germany.

3. Education of business men in Europe. A report to the American Bankers' Association. By Dr. Edmund J. James. (New York: American Bankers' Association. 1893. 8vo., pp. 232.) Well written and thoughtful. Already, in points of detail, a little out of date.

4. Journal of the Society of Arts. July 30 and August 6, 1897. (London: George Bell and Sons, York Street, Covent Garden.) Papers and discussions on Commercial Education at the International Congress on Technical Education, London, 1897. Valuable: Papers by MM. Jacques Siegfried and L. Suttle, and Messrs. Sidney Webb, E. E. Whitfield, S. Latham, H. W. Eve, R. Wormell, Bernard de Bear, T. A. Organ, and W. A. S. Hewins.

5. Institut Supérieur de Commerce d'Anvers. Dispositions réglementaires te Programmes des Cours. Programmes détaille des matières de l'examen d'admission aux cours de la première année (flysheets).

6. Commercial Education in Belgium: a paper read before the Foreign and Colonial section of the Society of Arts, London, May 21, 1895, by William Layton, Professor at the Institut Supérieur de Commerce at Antwerp. (Reprinted from the "Journal of the Society of Arts," June 1895.) (Antwerp, printed by J. Bouch erij, Rue Houblonnière 30, 8vo, pp. 16.)

A clear and interesting account of the work of the Institute.

7. Cercle des Anciens Étudiants de l'Institut Supérieur de Commerce d'Anvers. Sa Fondation et son Développement jusqu'en, 1894. (Antwerp: Vve. Jos. Thennis, rue du Lombard 28, 1894, pp. 32.)

8. (*a*) Règlements de l'École des Hautes Études Commerciales, Paris. (Paris: Nony et Cie. 17, Rue des Écoles, pp. 40.)

(*b*) Programme des conditions d'admission a l'École des Hautes Études Commerciales. (Paris: Nony et Cie., 17, Rue des Écoles, pp. 36.)

(*c*) Programmes officiels des cours des Hautes Études Commerciales. (Paris: Nony et Cie., 17, Rue des Écoles, pp. 42.)

(*d*) Programme des conditions d'admission à l'École Supérieure de Commerce de Paris. (Paris: Imprimerie Chaix, Rue Bergère 20, pp. 10.)

(*e*) Programmes officiels et détaillés des Cours de l'École Supérieure de Commerce de Paris. (Paris: Imprimerie Chaix, Rue Bergere 20, pp. 97.)

(*f*) Prospectus et Programmes de l'Enseignement de l'École Commerciale, Paris. (Paris: Imprimerie Chaix, Rue Bergère 20, pp. 10.)

9. Commercial Instruction, organized by the Paris Chamber of Commerce (viz., Commercial School, Superior Commercial School, École des Hautes Études Commerciales. Free Commercial Classes for women, girls, and men). (Paris, Imprimerie Chaix, Rue Bergère 20, large 8vo, pp. 193.) A useful account, prepared for the Chicago World's Fair, 1893, of the provision made by the Paris Chamber of Commerce for various grades of Commercial Education.

10. Programme des conditions d'admission à l'Institut Commercial de Paris. (Paris: Nony et Cie., Rue des Écoles 17.) pp. 34.

11. Programme des Cours à l'École Libre des Science Politiques, Paris. (Paris: Librairie Cotillon, rue Soufflot 24.) pp. 107.

12. Écoles Supérieures de Commerce reconnues par l'État. Règlements et Documents. (Bureau de l'Enseignement Commercial du Ministère du Commerce, de l'Industrie, des Postes et des Télégraphes.) Paris: Imprimerie Nationale 1891.

(*a*) Premier Fascicule. Cours Préparatoires—Concours d'Entrée. Régime des Cours Normaux. (pp. 71.)

(*b*) Deuxième Fascicule. Programmes détaillés des Cours Normaux. (Pp. 112.)

13. (*a*) Programmes détaillés des Cours Normaux de l'École Supérieure de Commerce du Havre. (pp. 36.)

(*b*) Programme des conditions d'admission à l'École Supérieure de Commerce du Havre. (pp. 26).

(Both, published by Nony et Cie., Rue des Écoles 17, Paris.)

14. Verordnung de Königlichen Ministeriums des Innern zu Dresden die Begründung einer Handelshochschule betreffend; vom 14 Januar 1898.

15. Zur Kaufmännischen Fortbildungsschulfrage in Hamburg, issued by the Verein für Handlungs Commis von 1858. Hamburg. Kl. Backerstrasse 32. (Hamburg 1896. Druck von W. Hohlweg). Also Reports of the Handelsschule of the above Society. 1893-7.

16. Industrial Education by Sir P. Magnus. (London: Kegan Paul. 1888. pp. 271.)

17. Report on Commercial Education to the Sheffield Chamber of Commerce, 1891, by J. J. Findlay. (Printed in Number 3 above, pp. 213, *seq.*)

18. Supplement to *Chamber of Commerce Journal*, September 1897. London, Gilbert & Rivington, St. John's House, Clerkenwell.) Report on discussion on Government Aid to Commercial Education.

19. (*a*) Scheme and Syllabus for Instruction and Examinations in Commercial Subjects and Foreign Languages, issued by the Technical Instruction Committee of the County Council of the West Riding of Yorkshire. (County Offices, Wakefield.)
(*b*) Mr. Graham's Report to the Technical Instruction Committee of the West Riding County Council on the Holiday Courses at Caen and on the Commercial Schools in Paris, Rouen, and Bordeaux, 1896. pp. 10. (County Offices, Wakefield.)

20. The *London Technical Education Gazette* (King, 9, Bridge Street, Westminster), May 1898, for report of Antwerp Congress on Commercial Education.

21. Congrès International de l'Enseignement Commercial tenu à Anvers, les 14, 15, et 16 Avril 1898. Rapports et Discussions. (Antwerp, Theunis, rue du Lombard 28.)

22. Report of the Conference on Commercial Education held at the Guildhall, London, July 8, 1898. (In preparation.)

As bearing on other grades of Commercial Education, reference may also be made to the following :—

A. Non-Classical Secondary Education in Germany.

(1) Lehrpläne und Lehraufgaben für die höheren Schulen, 1896. A translation of this book, by Mr. Lipscomb, is printed in the present volume of "Special Reports."
(2) Article on "The Realschulen of Berlin and their bearing on modern Secondary and Commercial Education," and on "The Oberreallschulen of Prussia" in the volume of "Special Inquiries and Reports," 1896–7.

[See also other articles on German, Belgian, and Swedish Education in the present volume.]

B. Evening Classes in Commercial Subjects in Paris.

(1) Cours d'Enseignement Commercial (classes du Soir), institués dans les Ecoles Communales de la Ville de Paris.
(*a*) Cours pour les Garçons, pp. 40.
(*b*) Cours pour les Femmes et les Jeunes Filles, pp. 40.
(Paris : Imprimerie Nouvelle, 11 rue Cadet.)
(2) Papers of the Association Philotechnique. (Paris : Rue Serpente 24.)
(3) Papers of the Association Polytechnique. (Paris : Rue Serpente 28.)
(4) Papers of the Société pour la Propagation des Langues étrangères en France. (Paris : Rue Serpente 28.)

C. Day Schools (3rd Grade) giving Commercial Instruction in France.

(1) Programme-Type des Cours dans les Écoles Pratiques de Commerce de Garçons.
(2) Programme-Type des Cours dans les Écoles Pratiques de Commerce de Filles.
(3) Programme du Concours pour l'obtention du Certificat d'Aptitude au Professorat Commercial dans les Écoles Pratiques de Commerce (3rd grade).

All these are issued by the "Bureau de l'Enseignement Commercial," of the Ministère du Commerce, de l'Industrie, des Postes et des Télégraphes. (Paris : Imprimerie Nationale.)

THE PRESENT POSITION OF MANUAL INSTRUCTION IN GERMANY IN PRACTICE AND THEORY.

By Dr. Otto W. Beyer (Leipzig).

Translated by Mr. A. E. Twentyman, B.A., of the Education Department.

There is little doubt that Manual Instruction, which, in the closing decades of the last century, demanded and partly gained admission into German schools,* is again beginning to play an important part in the modern science of education.

Its failure to maintain its position in the school was mainly due to two causes—in the public schools it was carried on too much after the fashion of the workshop, without any subordination to the general aims of education, while the private schools, which laid special stress on its educative side, were too few in number to influence the practice of the other schools. It was only when Pestalozzi's ideas on education began to be current in Germany that teachers realised the mistake of introducing the spirit of the workshop into the school. Accordingly, the "Industrie-Schulen" and the Manual Training Schools, from which so much had been expected, gradually disappeared. The reason for the scant measure of support given in Germany to the educative forms of Manual Instruction, which had been worked out in some private institutions, is to be found in the fact that the position of these schools, with regard to pedagogical thought, had undergone an entire change. In the previous century, they (or at least the best of them) had always stood in the forefront of educational progress, but since that time our school system has been almost exclusively developed on public lines, that the private schools have sunk to a lower rank, while the administrative authorities have, unfortunately, paid too little attention to the many healthy impulses which sprang from the practice of the better private schools. In part, this was impossible, because certain sides of the practice (*e.g.*, Manual Instruction itself) did not fit the frame-work of the public system. The result was that at the beginning of the ninth decade of this century Manual Instruction dragged on a miserable existence in a few private schools, Homes, Orphanages, Schools for the Blind and Deaf and Dumb, and, very exceptionally, in public schools, that is as far as Boys' Schools were concerned. In girls' schools the conditions were much more favourable. In many of them Manual Instruction had been for a long time a compulsory

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* For example in the "Industrie-Schulen" of Bohemia, the Manual Training schools of North Germany, and some private institution, as the Schnepfenthal in Thuringia.

branch of the instruction in which the "Special Method" had been worked out with great care. In the Kindergarten, too, since its foundation by Froebel, Manual Instruction has advantageously developed without, however, having received any new impulse since the death of its founder. But since the beginning of the eighties, new life has been infused into Manual Instruction for boys beyond the Kindergarten age. It was urged that it must be feasible to provide some occupations for boys similar to those which, in the case of girls, had proved their educational value, and that it could not be impossible to find a course of instruction adapted to the needs of the school. For the purpose of realising this aim, an important society was started in 1886—"Der Deutsche Verein für erziehende Knabenhandarbeit"—after the Central Bureau had been working in the same direction since 1881. The chief share in forming this Association was taken by Herr Emil von Schenckendorff, who is still at its head. For many years a member of the Prussian Assembly and Imperial Reichstag, by means of an extremely active agitation, he succeeded in awakening, in wide circles, an interest in the aims of the Association, and he is still increasingly active on its behalf.

The credit of having developed the various forms of manual occupations on their technical side is due to a group of Leipzig teachers, led by Dr. W. Goetze, who from the very beginning has made this department of the work of the Association his life's task, and is to be considered as the intellectual force in the technical and methodical development of the various kinds of manual work.

The aim of the Association is not to open up a source of income for the boys, as was chiefly the case in the old days, when the first attempt was made to bring Manual Instruction into relation with the young, but so to fashion this instruction that it subserves the educational purpose of the school. Whatever has been achieved in Germany since that date is due, to the largest extent, to the initiative of this Association, which numbered, in 1896, 170 corporative and 1,061 individual members in all parts of Germany. My immediate task is to trace the development which Manual Instruction has received at its hands.

It is especially due to its exertions that a large number of workshops have been opened, in which the boys are trained to various kinds of manual work. The actual number of such workshops is probably about 650. In 1896 they numbered 605, in 1892, 253, and in 1884, 164. The exact number that existed in 1880 cannot be accurately determined, but there were then 113 pupils, and in 1888 they numbered 5,678; and taking the same average size, there would be not many more than three workshops in 1880; but there probably were more, as at first these institutions would not be so well attended as later.

Of the 605 workshops existing in 1896, 404 were in Prussia; 65 in Saxony; 20 in Bavaria; 16 in Baden; 16 in Hesse; 11 in Saxe-Gotha and Wurtemburg; 10 in Saxe-Weimar; 9 in Alsace-Lorraine; 7 in Bremen; 5 in Lubeck, Saxe-Meiningen,

Hamburg; 4 in Lippe-Detmold, Schwarzburg-Rudolstadt; 3 in Reuss (younger line), Brunswick, Anhalt; and 1 in Saxe-Altenburg, Saxe-Coburg, Schwarzburg-Sonderhausen, Reuss (older line). No records exist for Oldenburg, Mecklenburg-Strelitz, Waldeck, and Schaumburg-Lippe. These workshops are sometimes quite independent institutions, sometimes associated with schools of various kinds. One hundred and forty-two are connected with elementary schools, 3 with intermediate schools (*i.e.*, Higher Primary Schools teaching one foreign language), 12 with Gymnasien and Real-Schulen, 4 with institutions preparing for Elementary Training Colleges, 32 with Elementary Training Colleges, 23 with private institutions (chiefly boarding schools), 28 with Orphanages, 29 with Schools for the Deaf and Dumb, 16 with Schools for the Blind, 9 with Schools for Mentally-Deficient Children, 9 with Reformatories, 69 with Kindergartens and similar institutions, 1 with an institution preparing for confirmation, 2 with Continuation Schools, and a survival of the industrial schools of the last century, which is only met with in a very small part of North Germany.

But though the external connection between school and workshop has been effected in many cases, there is as yet no thorough inner organic relation established between Manual Instruction and the curriculum of any school; though, indeed, some attempts have been made, as will be seen later on. For it is, of course, not sufficient that the workshop is within the school building, or that use of it is confined to one school, or that one of the teachers gives the instruction, or that the staff are favourably disposed to such occupations for boys. All this cannot replace the inner psychological adjustment of Manual Instruction to the curriculum; even if it were made obligatory, and not taken out of school hours, the proper relationship might still be wanting. The figures cited above show that of the schools with workshops, by far the greater number are elementary schools; the higher public schools claim but a minute percentage, and private schools (which may generally be reckoned to the latter class) but few more. It is gratifying to see the relatively high number of special institutions (Orphanages, etc.) for which, from a variety of causes, Manual Instruction has a special importance. Though, as yet, but few of the higher schools have displayed any interest in Manual Instruction, their number is distinctly increasing. With reference to the age of the pupils, in the elementary schools the limit is given by the fact that the pupils leave at 14, but in the higher schools they might continue these occupations till the close of the school period. There is no intrinsic reason why Manual Instruction should cease at any given class in a higher school. On the contrary, the making of simple apparatus for the Natural Science Instruction might be conducted in the highest classes with the greatest advantage. (*Cf.* "Home Experiments" in England and America.)

With regard to the different forms of Manual Instruction practised in these workshops, a strict canon has gradually been

evolved, which, almost without exception, includes the introduction of a special preliminary course, and then cardboard and wood-work. Occasionally we find clay-modelling, metal-work, and glass-blowing, as well as gardening, which occupies a position peculiar to itself. In the preliminary course, soft clay, paper, cardboard, natural wood (generally thin sticks with the bark still on them), and split wood, are the chief materials used. The principal tools are the hands themselves, as the original natural implements of man; then knife, scissors, hammer, and pincers. The object is to acquaint the pupil with rudimentary notions of human toil. In the cardboard work are included preparatory weaving and folding, and the real cardboard work, that is, the making of all kinds of useful and ornamental articles out of cardboard, the surface of which is, as a rule, decorated and enlivened by the pasting on of coloured paper. Geometrical figures may also be made with this material. In a few cases, bookbinding is added, from the making of note-books to the actual binding of books, the mounting of maps and time-tables, etc. Wood-work is the branch which comprises the greatest number of subdivisions. These are occupations with natural wood, fret-work, carpentry, chip-carving, work with the gouge, inlaid-work, wood-carving, turnery, and poker-work. For the needs of rural schools, a special course of rural wood-work has been devised. By far the commonest are carpentry and chip-carving; the other forms are only occasionally met with—turnery and poker-work very rarely indeed. Metal work includes smithy-work, tin-work (bending and soldering), bending of narrow hoop iron (Kleineisenarbeit), wire-work (which quite exceptionally occurs as filigree work), and rural metal-work suited to the needs of the country population. If metal-work is practised at all, it is generally wire-work and tin-soldering, and less often "Kleineisenarbeit." Glass-blowing is only practised so far as it is needed for the preparation of simple apparatus for the Natural Science Instruction. Clay-modelling (the moulding of some plastic material-clay or so-called plastilina) has not infrequently been included among the occupations of the preliminary course, and, here and there, among those of the higher classes; but it is not so widespread as its exceptional educational value deserves. Gardening has only lately taken its place among the occupations, for which "Der Deutsche Verein" is trying to interest the young. It has no special characteristic material. Considering its technical side and the material, it might, perhaps, best be called "earth-work"; but looking at it from the pedagogical point of view the guiding thought lies not in the material, the earth, but in the needs of garden cultivation, which requires tasks of pure observation, as well as the care of animals and plants, the tilling of the soil, and certain manual operations.

With regard to the age at which the various occupations are taken, the preliminary course is generally given between the ages of 8 and 9, cardboard-work between 10 and 12, while wood-work is, as a rule, begun after the completion of the 12th year.

The special methods suited to each class of occupation have been worked out in the Leipzig workshops, under the direction of Dr. Goetze, and published in separate yearly courses. The patterns bear the title, "The Instruction Patterns of the School-Workshop in Leipzig." Twelve parts (1 Preliminary, 3 Cardboard, 3 Carpentry, 3 Chip-carving, 1 Wood-carving, 1 Metal-work, 1 Wood-work). Published by the Leipzig School-Workshops. These are widely used in Germany, in many schools exclusively, in some concurrently with others. Of the latter, mention may be made of the following:—

Barth und Niederley. Die Schulwerkstatt. Leipzig, 1882.

Gelbe. Der Handfertigkeitsunterricht. Dresden, 1885.

Herlet. Papparbeiten. Drei Hefte. Gera, 1889.

Müller & Füllgraf. Lehrgang für die Hobelankarbeiten. Berlin, 1889.

Urban. Die Knabenhandarbeit. Methodisch geordnete Sammlung zur Anfertigung einfacher Holzarbeiten Wien, 1889.

Vollers. Kerbschnittvorlagen. Hamburg, 1889. Neue Folge, 1891.

Cranz. Kleineisenarbeit. Esslingen, 1890.

Koch. Der Kerbschnitt. Carlsruhe, 1890.

Füllgraf & Wuckerow. Der Kerbschnitt. Berlin, 1890.

Kumpa. Anschauung und Darstellung. Darmstadt, 1890.

Lampe. Kerbschnittvorlagen der Lübecker Schülerwerkstatt. Altona, 1891.

Sturm. Leipziger Vorlageblätter für Thonfingerarbeit Thonziehen, Thonschneiden u. Modelliren. I. Leipzig 1892.

Urban, Richter u. Blackowsky. Erziehliche Knabenhandarbeit. Methodisch-geordnete Vorlagesammlung. Graz, 1892.

Springer. Der Knabenhandarbeitsunterricht im Anschlusse an den Zeichen-u Raumlehre Unterricht in der Schule. Vier Hefte. Breslau, 1892-4.

Götze. Schulhandfertigkeit. Leipzig, 1894.

Lehrgang der Hobelbankarbeit der Lehrerbildungsanstalt. Leipzig, 1894.

Berliner Lehrgang für leichte Holzarbeiten.

Kalb. Der erste Unterricht in der Knabenhandarbeit. Gera, 1895.

Scherer u. Eckert. Zeichnen und Handfertigkeit. Berlin, 1895.

The articles produced by the work based on these and similar books are playthings, objects of household use in town and country, school utensils, and materials for object lessons and other instruction. In the production of these objects the child learns and executes those exercises which are considered absolutely necessary for the mastery of the technique of the particular branch, suited to the age of the child. Instruction in technique is given either individually or to groups or classes. When

Manual Instruction for boys began to spread at the beginning of the eighties, instruction was generally given to individuals. At that time the instructors had, as a rule, too little practical experience to be able to help themselves in the face of difficulties arising from the inequality of the pupils, the materials, the tools, etc., in any other way than by taking the pupils individually. But seeing that if it was intended to grade the instruction by classes, each boy must be doing the same work, this individual instruction was a very great waste of energy. To remedy this defect the boys were divided into groups, and each group instructed separately. But all far-sighted teachers admit that this ought only to be a stage towards class-instruction—the ultimate aim, which in many cases may not yet be attained, but which must be clearly kept in view.

Professional teachers are now, fortunately, almost exclusively employed as manual instructors, whereas at the beginning of the movement the instruction had often to be entrusted to artisans, since sufficient teachers were not everywhere to be found possessing the necessary taste and skill to devote themselves to the work. The "Deutsche Verein" has rightly laid it down as one of their principles that if manual instruction is a part of education, it must be in the hands of the educator. Experience has proved it easier for a teacher to acquire the necessary technical skill than for an artisan to become a teacher. The Association upholds the principle the "master" in the workshop, the teacher in the school. Accordingly it has also taken in hand the training of the instructors, and carries on this work at the training school at Leipzig, which it established in July 1889. This training college sprang out of the summer holiday courses held at the Leipzig school workshops in 1884-5-6. Every year this institution holds courses in the following branches.

(1.) Instruction in the exercises of the preliminary course, given by a Leipzig teacher and a mistress, who instructs the students of the "Kindergarten-Seminar" of the Municipal Continuation School for Girls in the practice of the Kindergarten.

(2.) Cardboard work under the direction of a master bookbinder.

(3.) Carpentry work, under the direction of a master joiner.

(4.) Rural woodwork, under the direction of a wheelwright.

(5.) Wood-carving, under the direction of a sculptor.

(6.) Metal work, under the direction of a master locksmith.

(7.) Rural metal work, under the direction of the same instructor.

(8.) Clay and plastiline modelling, taught by the sculptor.

(9.) Gardening and fruit-growing, taught by one of the lecturers at the University Agricultural Institute.

(10.) Glasswork (for the construction of physical apparatus), by a Professor from a Realgymnasium.

The aim of the instruction in the various branches is principally the acquisition of technical skill, and the educational application of this skill to the preparation of materials for object lessons; attention is also paid to the construction of apparatus for instruction in Nature Knowledge, Geography, Mathematics, Physics; but this is hardly sufficiently simple, if we adhere to the principle that the pupils must be able to reproduce the apparatus without much difficulty, should he be called upon to conduct experiments for himself.

These courses last six weeks, and are held three times a year, at the beginning and at the end of the summer, and in the autumn. Nearly all the participants are teachers from Germany and abroad, the Germans being principally teachers in elementary or intermediate schools or training colleges, seldom University trained teachers from higher schools. Of foreign countries England has always sent no inconsiderable number to Leipzig; many with exhibitions from the County Councils. Even though similar courses have been instituted for them at home English teachers are still to be found at Leipzig.

To make a strict methodical progress from the easier to the more difficult possible, the institution has gradually set up a normal course for each branch of instruction, according to which the students have to work. These courses of instruction are supplemented by a large collection of models, which have been brought together in the course of years. Besides these models, the institution possesses a collection of patterns and a library, which are available for those who are following the courses, and for the members of the Association. The special monthly magazine (Blätter für Knabenhandarbeit) provides the intellectual link between friends and supporters of Manual Instruction. The magazine contains general articles of a theoretical, historical, and statistical nature, the notices of the Association, illustrated descriptions of articles made, practical novelties for the workshop, notes on the progress of the work, a bibliography, and occasional criticism of the new books on the subject, and a current list of new members.

Since July, 1896, the institution has been housed in its own buildings, provided for it by the town of Leipzig, and granted on the most liberal terms—at present at a rental equivalent to the interest on the outlay for the building only, and not for the site. The town has also surrendered the right of withdrawal of the lease, while the Association, if it found itself unable to pay the rent, could resign the lease. If the Association should desire to buy the building, it is possible that the yearly interest (which in itself is not high) would be reckoned as an annual redemption of the debt at the rate of ½ per cent. The town also advanced a large sum towards defraying the cost of the fittings and equipment. The building consists of a basement, three floors, and attics, and contains the following rooms: in the basement the caretaker's rooms, a room for gardening, a workshop for clay-modelling; on the ground floor, a carving-room, a workshop for metal-work and rural carpentry, and an exhibition room; on

the first floor a lecture room, also used for social meetings of the students following the courses, reading and writing rooms, a room for the Director and the staff, and a second exhibition room; on the second floor a carpenters' shop, a room for card-board work, and a third exhibition room; on the top floor a second card-board room, and workshop for the preliminary course, a class-room for the so-called school Manual Work, and a fourth exhibition room for the productions of other workshops, and, lastly, a store-room.

Behind the house lies a garden, an excellent object lesson for those students that take an interest in school-gardening.

Side by side with the Leipzig Seminar, in the course of years, a number of other institutions have sprung up, which supply the needed training for manual instructors in various parts of Germany, and supply it satisfactorily. We can cite the courses in Barmen, Berlin, Breslau, Danzig, Darmstadt, Dresden, Essen, Gera, Gotha, Köln, Königsberg, Posen, and Thorn. Some of them try to specialise in certain directions; for example, in the Darmstadt course of Prof. Kumpa the manual exercises are directly connected with the instruction in Geometry; in Königsberg the aim is to bring manual instruction into as close a relation as possible with the curriculum. No doubt there is still room and opportunity enough in Germany for the establishment of such local courses at other centres. For institutions on so large a scale as that of the Leipzig Seminar are not necessary to enable the teacher to acquire such a mastery of the technique of any branch as he can utilise in the instruction of his class; this he can acquire from any capable master-workman in the provinces. The management of the Leipzig Seminar seem to be of the same opinion, and, therefore, make it rightly their aim to develop their courses as central courses for those who have passed beyond the elementary stage, and wish to still further extend their practice and theoretical knowledge. Besides these opportunities for practical training there exists, since 1895, a yearly course of lectures (with demonstrations) on the theory. This course is held by the writer of this article every summer at Jena, and forms part of the Holiday Course that has been held there for the last ten years. These lectures survey the whole field of Manual Instruction, including the Kindergarten and occupations for girls, and also the school-like arrangements which have been provided to foster a love for labour in both sexes, after the elementary school course is over. The demonstrations are intended to exemplify the course of instruction in those schools in which Manual Instruction is an organic part of the curriculum. A collection of the literature on the subject is also exhibited, and the lectures are followed by a discussion.

If we ask what results the Association has achieved we must distinguish between the efforts to include Manual Instruction among the educative occupations in which it is desired to interest the young out of school hours, and those which aim at its inclusion among the direct means of school education. With regard to the first, one may say that the success has been most remarkable. This is shown not only in the number of

workshops which have been started directly or indirectly through their instrumentality, but also in the zeal and carefulness which the boys display in their work; and, lastly, in the interest which adults have learnt to take in this means of education. To the teacher it is a new and very welcome ally against idleness, the root of all evil; for, from the very nature of the work, every hour won in this way from idleness makes for moral progress.

On the other hand, with regard to its inclusion amid the direct means of education, the task is as good as not begun. There exists as yet no school in Germany in which Manual Instruction is treated with the same consideration as the other branches of instruction, and allowed to exercise full influence on all those branches with which it can be connected. We must, however, in all fairness, add that some important attempts have already been made in this direction.

Prof. Kumpa, for example, at the Technical High School in Darmstadt, bases his geometrical instruction on manual occupations, by illustrating geometrical concepts and propositions with models, which are then drawn, and afterwards represented in the solid. For this representation, card-board, or thin boards (*e.g.*, cigar boxes) are used. The implements employed are of the simplest nature, and the production is very easy. With this representation of the model is associated the application of the knowledge thus acquired to the making of simple objects of every-day use, based on such geometrical propositions. The advantages of this method are: (1) the sequence of objects is mainly determined by the geometrical instruction, as the technique of production requires no separate methodical course; (2) the instruction can be carried on in each class, without any great outlay, side by side with the instruction in geometry or even during the same.

It has also been attempted to connect Manual Instruction with Drawing. Two methods are possible: Manual Instruction either precedes the Drawing or *vice versa*. The first method is that adopted by Herr Hertel, a drawing master in Zwickau. He first of all discusses with his class one of the following simple geometrical forms—sphere, cylinder, cone, cube, prism, pyramid, oval, ellipse; then the bodies are moulded in plastilina, without any pattern; firstly, in the same size as the original model, then larger, then smaller. The copy is then compared with the original to see what is wrong; that is corrected again without a pattern. If the correction is satisfactory the model thus moulded is drawn on paper, or a slate, from different points of view and in profile. The original simple bodies are now combined, and the new forms again modelled and drawn. Finally, the instruction deals with objects from real life, which are based on the primary forms that have been studied.

The method of allowing Drawing to precede Manual Instruction is followed by Scherer, Inspector of Town Schools in Worms, and by Dr. Springer, District Inspector of Schools in Neurode (Silesia). For the first three years Scherer has the Drawing

copy reproduced in a somewhat altered form in card-board, and then cut with a knife (at first, to secure a clean edge, the T square is allowed). In the fourth year, out of the surface figures, cut from the card-board, solid bodies are formed, which are then drawn in outline, elevation, and perspective. In this method, Manual Instruction remains quite within the limits of the curriculum, and can be carried on with very simple means. Dr. Springer is not content with the mere reproduction of the form, but uses the Drawings as patterns in a course of chip-carving, which runs parallel to the Drawing. The pupil's attention is thus directed to the adaptability of drawn forms, and they gain life and interest. Fret-work, metal-work, and, afterwards, carpentry, accompany the instruction, and here the carving finds a practical application.

About ten years ago, in the practising school of the University Pedagogical Seminar, at Jena, Prof. Rein connected the clay-modeliing with the instruction in History. In the Seminar class of Gymnasium pupils, which has, unfortunately, ceased to exist, the History programme included a description of the architectural productions, characteristic of each period. Thus, while considering Egyptain civilisation, the pyramid of Cheops, the Egyptian temple pillars without ornaments, the conventional lotus flower, the papyrus blossom, pylons without ornament, etc., were discussed; in the Homeric age, the arms and utensils of the period. Whatever was so discussed, was also, as far as time permitted, modelled in clay.

We must not ferget to mention the different school appliances which, in some workshops, are constructed by the pupils; *e.g.*, card-board models of geometrical bodies; plane figures made of wire; models to illustrate geometrical propositions; simple apparatus for instruction in Natural Science; models of geographical entities (Mountains, Valleys, Landscapes, etc.), made from card-board strips; models of certain kinds of houses (*e.g.*, pile-dwellings). Instead of the laborious combination of these geographical entities out of card-board strips, occasionally, but unfortunately quite exceptionally, such reliefs are prepared from moist sand in a room set apart for the purpose.

The school garden must also be mentioned in this connection. By this is not meant any teacher's garden, which lies close to the school, nor such a one as is frequently found in large towns, in which plants are grown on a large scale for the purpose of supplying the schools of the town with materials for botanical instruction, but a garden which, under the direction of the teacher, is kept in order by the pupils, and in which each pupil has his own plot, where he is sole master. Such a garden serves many purposes, and around the many manual exercises which it demands, quite a number of other branches of the instruction may be concentrated without any undue wresting of their own special character. Such gardens are found occasionally in Thuringia and Saxony, but their classic home is Austria.

Lastly, we must notice the State Manual Training Schools (Handwerkerschulen) in Austria. They receive boys from he

Elementary Schools as early as the age of 12 (provided they bring good reports), and, having a two or three years' course, replace the two highest classes of the elementary school, as in Austria the school period lasts from 6 to 14. At the same time, the instruction, even in the lowest class, assumes the character of a direct preparation for a manual calling; and so, side by side with theoretical branches, practical instruction in the workshop plays an important part. This is given by two foremen, one for carpentry, the other for metal-work. In the lowest class, all boys receive instruction in both wood and metal-work; in the second class they must decide whether they will follow a trade working chiefly in wood or metal, and the school is divided accordingly into two groups. The theoretical instruction is adapted to the future calling. The Austrian Government seems to have obtained good results from these schools, for new ones are continually being opened. Nothing of this kind exists in Germany, but it may be noted that an idea, similar to that on which the Austrian schools are founded, was upheld, 40 years ago, in Leipzig by Prof. Ziller. He proposed that this introductory trade instruction should be assigned to special alternative classes in the Elementary School.

From the arrangements, which have been described, it is clear how great is the interest taken in the attempts to solve the problem of an organic connection of Manual Instruction with the curriculum. From the needs of the various branches of instruction (Geometry, Drawing, History, Geography), one is led to make the same demand. The Association has lately pressed for a tentative introduction of Manual Instruction into some schools where the circumstances are particularly favourable, *e.g.*, where the school authorities are well-disposed, where the skill of a particular teacher encourages such an attempt, or where some other special means for the purpose are available. Meanwhile, some towns have determined to make the introduction of Manual Instruction obligatory from Easter, 1897, and, in view of the present situation, this may be considered an advance; but it must also be remarked that this compulsory introduction does not preclude the possibility of Manual Instruction remaining really as much outside the curriculum as before. This danger will always exist so long as the "programmes" set up by the Association (which are directed towards the attainment of technical skill) have not been so remodelled that the theoretical instruction shall be treated as the "predominant partner," to which Manual Instruction has to subordinate itself. One must assume that any scheme drawn up for the theoretical branches of instruction is conscientiously deduced from the general aim of education, and the special aim of each individual branch. It must provide a firm, unalterable frame-work, into which all else must fit. Each branch, not Manual Instruction simply, occupies, with regard to this general aim of education, a subordinate position. If, then, the scheme for the theoretical branches has been fixed, the friends of Manual Instruction must see how this latter can be most suitably organised within the space assigned to it; so that the technical progress in each kind of occupation may be

least interfered with. The Association thought that, if it perfected its programmes from the point of view of technique, the curricula of the schools must be adapted to suit them; but the mountain will not come to Mahomet, and, eventually, there will be no course open but for Mahomet to come to the mountain. This step ought to have been taken years ago, for the salvation of the school. Years ago, it was proposed by the writer of this paper to take certain typical curricula, and work them through, branch by branch, to see how far manual occupations could be included, and it was to be considered how these occupations might be executed with the simplest materials, the simplest tools, and the simplest technique. The example of Professor Kumpa proves that by starting in this manner, with the needs of each individual branch, success might have been attained. The opposition which the Association has lately had to encounter, even from persons who are convinced of the necessity of supplementing instruction by occupations, is due to the action of the Association itself; and if the Prussian Government has lately declared that there is no intention of introducing Manual Instruction into the schools, it is certainly not due to opposition of the Prussian Seminar-Directors to educational progress (as the friends of the Association maintain); but the Prussian Directors are probably convinced that the only kind of Manual Instruction now prevalent in Germany is unsuited to the school. Certainly no one will deny that the Association is impelled by an honest zeal, and has displayed an admirable activity; but it has not taken the proper measures for the evolution of occupations suitable for inclusion in the curriculum of the school, and it might as well admit this at once. For it is absolutely impossible to attain this end in an independent institution, which lacks close and continuous intercourse with school practice. Such familiarity with the needs of the school is absolutely necessary for the purpose.

For the proper development of suitable occupations, not only is this intimate connection with the school necessary, but the school must be one quite unfettered with regard to its curriculum, and answerable only to the laws of the science of education; a school in which it is permissible, with due regard to pedagogical principles, to make experiments with new methods, with new branches. Of such a school a training school of Manual Instruction would form an integral part, under the direction of the Headmaster of the school. The school determines on the ground of scientific considerations, what form of Manual Instruction shall be introduced into the curriculum, and the Training School determines the technical means and methods. These methods are then subjected to a stringent test in the practice of the school (and perhaps of some other schools as well). If it is found that alteration is needed, this is made, and repeated till a satisfactory result is obtained. To fulfil all these conditions, the school must stand under the protection of the freedom of a University, where the director of the school is the Professor of Pedagogy—it must be the practising school of a University Pedagogical Seminar.

We have, unfortunately, only one such Seminar school in Germany, and even here there is no "experimental station" for school Manual Instruction. If, in the place of this single instance, there existed at each University such a seminar, and such a practising school with a Manual Training workshop, one would be astonished to find how quickly the problem of the needs of the school would be solved. The cost of such an additional branch to the seminar would be inconsiderable compared with the present actual expenditure of the Leipzig Seminar, which would probably suffice to maintain such additional courses at all pedagogical seminars in German Universities. We may, perhaps, live to see England and America, which are making the most praiseworthy efforts in educational matters, or any other country, anticipate us in this matter. To supplement the ordinary school education by a well thought-out pedagogical system of Manual Instruction is a pressing need among all civilised nations, and a large measure of fame awaits the man who successfully solves the problem.

Having now taken a short survey of the development of Manual Instruction in German practice, it remains to discuss the principles of its relation to the aim of education.

It is incontestable that the purpose of education is to so equip the pupil that, when its protective influence is withdrawn, he may be able to take his share in the duties of his age, as far as social position and individual capacity admit. This demands a rudimentary insight into the social organism. The pupil can only acquire such an insight if his school instruction has enabled him, in some measure, to grasp the preliminary assumptions. These lie rooted in the past, and therefore the chief task of educative instruction is to lead the pupil, by means of a consideration of history, to understand the development of human civilisation. Humanity owes any progress it may have made in the course of centuries, to its own resolute, careful toil. Civilisation is, in fact, toil; and we must trace in sympathy and admiration the course of human toil through the chain of human development. Naturally, education can only concern itself with the work of large groups. The actual content and the real ideals of human toil can only be found in that which has engaged whole groups of humanity through a succession of generations. The key to this lies in the study of the history of civilisation. By civilisation (Kultur), we understand the intellectual progress of mankind in all fields of work. But this is not the original meaning of the word. When the word "culture" first became current in ancient Rome, it signified the field of bodily toil, the cultivation of the soil, and the improvement of its products, as is seen in such expressions as "*colere agros.*" The change of meaning points to a close connection between culture in the original confined sense, material culture, and culture in the figurative sense, intellectual culture, and in particular between the latter and one branch of material culture to which language has given special prominence—the cultivation of the soil, agriculture. With language, however, the naïve popular conscience, poets, philosophers, historians, and political economists agree; agriculture

is the source of all higher culture. The whole course of human development actually confirms this fact, that all intellectual culture is deeply influenced by the material. There exists, even, a school of historians which regards material culture (or, with reference to the world of human toil, we may say economic culture) as the final determining cause of all intellectual culture, of law, morality, religion, art, and science, and finds in economic history the sole key for the comprehension of all processes in every field of civilisation. Be this as it may, the influence of economic on intellectual culture cannot be denied, and, therefore, in education, the history of this economic culture must be traced through the centuries with equal care with the intellectual.

In a summary survey of economic history, we may note the following points. An economic fact of the first magnitude is the transition from nomadic to a settled life. The fixed point of attraction created by the immovable house and its appendages, (whether these latter be held in corporate or individual ownership), proved itself so influential in all aspects of culture that we are well justified in dating an important era in human development from the cessation of nomadic life. Within this period of wandering, we can distiguish two stages. In one, man gains his livelihood by hunting (Stage of Hunting and Fishing); in the second, by training and rearing animals to serve his purpose during the whole of his life. (Pastoral Stage.) Before man had learnt to tame and rear animals (which in itself appears no inconsiderable intellectual activity, and an amount of experience extending over a long period of time), he has no option but to live from hand to mouth, or, as the political economist says, from the mere enjoyment of natural goods. At this stage, whatever is found, caught, seized, and collected, is immediately used for domestic purposes, either totally unprepared or with the least artifice possible. We might call this stage that of "simple appropriation." Within the period of fixed homes there are also two distinct stages—the stage of agriculture, where man actually tills the ground, and himself reaps all the blessings that this work brings; and the stage of industry and civic toil. If the work of the townsman is performed under the restrictions imposed by a narrow Guild (as in mediæval days, and far into modern times), it is the stage of "Guild handicraft," which is followed by the non-guild civic industry—the stage of modern citizenship, characterised by the general employment of steam power and electricity, and by factory production.

We thus obtain an ascending ladder of economic progress, and this is best studied by connecting it with the consideration of typical persons, who are representative of the particular economic ideal. For all abstract ideas are best understood by the young when they are embodied in concrete personages. These would be the Hunter, the Fisherman, the Nomad Shepherd, the Farmer, the Craftsman, and the modern citizen. The instruction has to show how at each stage man has used natural products for his own use.

If the instruction does all in its power to bring these stages within the comprehension of the young, education cannot content

itself with this presentation. The pupil must be introduced to the objects of nature, not merely through the intellect, but also actively; in order that the theoretical observation of nature may not be too strongly opposed to the technological point of view of a mastery over nature; so that the pupil may gain a faint idea of the difficulties that arise when man attempts to re-fashion natural objects according to his will. Some, at least, of the experiences of mankind in the working up of natural objects, the pupil must pass through within the modest limits that the school must always observe. Modern education still clings to a one-sided accentuation of Intellectualism—of mere learning; and though this one-sidedness has assumed a character that has long been repudiated by all thinkers, a revision of the curricula has been justly demanded, based on the principle that the individual experience of the pupil, his own tentative activity, shall be fully exercised, that side by side with the head the hand is also engaged; and this demand is well-founded when one considers how close is the connection between the training of the hand and the intellect. The hand aiding the eye makes a nicer distinction of ideas of space possible. It is an open question whether, if we were endowed with a sense of sight but had no hands, we should be able to find our way about in space as the blind man does, for whom his hands must replace his eyes. This nicer distinction of spatial ideas, which the use of the hands produces, is necessary, not only because we have to live, move, do our business in this world of space, but also because we can hardly realise abstract non-spatial ideas in any other way than by calling to aid our ideas of space. If we talk of ideas of Subordination and Co-ordination, if we speak of a "before" or "after" in time, analogies from the world of space are always present. If we think of intellectual conception and grasping, we retain the language of spatial grasping—taking hold of, etc. No animals, not even the most highly developed (with a few exceptions), are capable of such physical seizing and grasping, because their fore extremities lack the anatomical formation for such an activity. This, and the absence of the power of speech, are the reasons why the most highly developed animals do not attain to the formation of ideas; and, as they cannot with their extremities place anything before them for observation, conveniently dissect any object and put it together again, they can form no concepts in the higher sense, have no perception of the separate parts of a compound idea. We now understand why Herbart said: "The hand has its place of honour, side by side with language, to raise man above the beast." The hand is, in a variety of ways, serviceable in human "dealings." With the hand alone man can spin, weave, cut, dig, row, shovel, mince, scrub, rub, bore, stick, knock, hit, push, beat, throw, grind, tear, seize, pinch, squeeze, knead, shape, and paint. So here, too, he has many aids to perception, many means of expression at his command, where other aids and means are not to be had. Thus symbolising and abstraction are made easier for him (as we have seen, he loves to borrow his ideas from the world of space), and thus is opened for him a way of discharge for all that has gathered within him, and which, at

times, can prove an intolerable burden. The hand is not only itself means and instrument (especially a modelling instrument in the widest and symbolic sense), but also a "handle" for other instruments—in the hands of the craftsman, by which he obtains a wider prospect for the enrichment of his intellectual life. Arm and instrument form, at times, a kind of machine, so that the use of certain implements is an incentive to study the working of the simplest machines. The hand, through its sensibility to heat and cold, is a fairly good thermometer, and, through its power of transmitting sensations of pressure, a scale of tolerable accuracy. To test hardness and weight without any instrument, is only possible with the hand, and without it the difficulty of forming an estimate would be greatly increased.

It is evident that all activity of the hand is the easier the more it is practised, and as the acquisition of such manual skill increases the possibility of enriching the intellectual life, the training of the hand is part of the general intellectual training of man —it is one of the primary studies, as Comenius called them.

This practised skill of the hand can only be attained by manual labour, and this labour has its own educative element. All labour requires a fixed aim. This aim is sub-divided according to the nature of the work into secondary aims, and these secondary aims are most clearly seen when the chief aim is the production of a solid body composed of several parts. The production of such a solid body makes at once clearly visible whether every part of the execution was correct. Manual instruction is of great service in education through the control which it constantly exercises over the right application of the chains of ideas that accompany the production of the object; for well arranged successions of ideas are of the greatest importance in mental training, and the objective of all instruction. An external occupation (such as manual instruction affords) exerts a favourable influence on the approximate and correct association of ideas; and each glance at the work recalls to memory the principal aim, the dominant group of ideas; and it is particularly in the case of ideas accompanying manual work that this dominant group of ideas is easily retained. A glance at the result of his work shows the pupil what progress he has made, while in theoretical instruction a pupil may often work for weeks together before he notices any marked advance, because he has no such ready means of observation at his command.

Manual Instruction is also to be cultivated for the possibility it affords of illustrating, by observation, certain concepts derived from instruction and experience. The best proof that a pupil has understood a lesson, which required spatial imagination for its comprehension, is his ability to reproduce the object in the solid, geometrical bodies in mensuration object lessons, an apparatus in Natural Science, a model (in clay or other material) of a country studied in the geography lesson. To sum up, manual occupations are to be cultivated on account of the intimate connection between manual and mental training for the disciplinary force of physical toil, by reason of the possibility of making readily comprehensible the ideas derived from instruction and experience.

However, there remains the task of making a wise selection from all the mass of exercises that may be used, chiefly by paying attention to that circle of ideas which is to form the foundation-stone in the training of the young, viz.: the circle of ideas of the instruction; all manual exercises must be brought into a close, obvious and natural relationship to the instruction. It is here that the framers of many of the exercises current in Germany have gone astray by renouncing this relationship; for they thus deprive themselves of their best ally in making a lasting impression on the young. From the point of view of mere occupation such exercises have indeed their value; but it must not be overlooked that as occupations they have many better competitors for the interest in the boys, *e.g.* modern games (which fortunately nowadays are so keenly cultivated), are, in this connection far preferable to manual instruction; 1st, because they necessitate open air; 2nd, because such games develop presence of mind (which manual instruction does not); 3rd, because the will of the boys is exercised in far freer fashion; and lastly, because their influence tends to develop social qualities. There are manual occupations in which this last factor is also present, but it need not be essentially so. On the other hand, manual occupations, carefully devised from the point of view of the curriculum, have a peculiar value of their own (which nothing can replace) for clearing and visualising the concepts of instruction, and for connecting theoretical knowledge of nature with that of the mastery over nature gained by technical skill in its widest sense.

If we connect the theoretical instruction of Nature knowledge with the consideration of the economic culture-epochs, this connection of the curriculum with manual occupation would work out somewhat as follows:—As the discussion of the culture-epochs presupposes a large number of natural experiences, and also a certain intellectual ripeness, even when in the instruction allusion is regularly made to the pupil's own knowledge and experience of the present, it is necessary to have a preliminary introductory course, during which the pupil, in numerous instructive walks under the immediate direction of the teacher, has the opportunity of learning how to observe and comprehend. This should form the beginning of school-life, and there should be no ground for objection if in this course (which might under circumstances last two years) sitting on the school benches should be the exception and instruction in the open air the rule. In this way the transition from the perfect freedom of the pre-school life to the perfect restriction of the school (a transition at present totally unmitigated), would be rendered less harsh. On the numerous walks (which would be devoted to the collection of "raw-material" for later systematic instruction) a number of natural objects would, as a matter of course, come into the hands of the pupils, which could well be made to serve some pleasing purpose. For the child the world of nature is at first nothing but a large treasure-house of objects which challenges the activity of its powers of work, imitation and invention. Such objects are to be collected, and to be taken home as material for manual occupation. When

sufficient material has been collected for such exercises and for instruction, then is the proper time for teaching in the school-room. The manual exercises which accompany the instruction should be arranged in a manner similar to that of the Froebel occupations; they might even, in part, replace the latter, as these occupations are often too hard for the Kindergarten proper. It is hardly necessary to add that this observation-course does not cease with the beginning of the discussion of the culture-epochs, but runs parallel to the theoretical instruction, since the pupil cannot have too many points of contact between the instruction and his own experience.

In determining what manual exercises shall accompany the discussion of the separate economic epochs, care must be taken that the exercises chosen serve to illustrate the period. If a manual occupation can be chosen, which has itself played a part in man's development, so much the better, but the choice need not be confined to such, but may also employ others in so far as they serve to illustrate certain concepts of the instruction, and are suitable to the child's points of view, and to his technical ability.

In the epoch of the hunter and the fisherman such manual occupations played a great part in human development as could be performed without any or with quite primitive implements; weaving, rope-spinning, net-making, sewing, and the making of vessels of clay. Of these the following can be used as manual occupations in the school:—The weaving of threads and bands, knitting and clay-modelling. For weaving with bands one can use a material which indeed only appears later in the history of cultivation, but which makes the weaving much easier, and, in addition, is a prominent feature in the school-life of the boys. This is paper, which can altogether replace all vegetable and animal weaving materials. When paper has been introduced, cardboard can soon follow, which is well employed in the formation of large rectilineal surfaces out of small ones, through combination. Knitting affords occupation for girls of this age. Of special importance for the purposes of education is modelling in clay, which can be carried on entirely without any instrument; as pure hand work; free moulding in clay is the truest manual occupation, far more so than carpentry, cardboard, or metal work, as these cannot be carried on without the employment of artificial tools, though they can be carried on without the hand, as in the factory; but clay-modelling cannot be carried on at all without the hand, and a factory producing all free forms is inconceivable. The material is extremely pliant, obedient to the lightest touch of the hand and each fancy of the artist, and at the same time quite harmless; there are no splinters as in wood, stone, and metal work; there can be no burns as in smithy and foundry work. The material for such work is easily procured, for everywhere where rain or flood has wrought its will, there can be found in suitable places a clay-like material.

In the epoch of nomad life all these exercises should be continued. Here the real cardboard work can begin, it forms a suitable supplement to clay modelling, especially in assisting the

development of spatial imagination; while the latter deals with the formation of perfectly free forms, the former makes it possible to produce geometrically fixed straight-lined figures, and thus can materially assist the instruction in geometry, and it can be so systematised that a number of mathematical propositions (particularly those of plain and solid geometry) can be deduced from it, and that it may be easily connected with other branches. It can also prove of great assistance in the development of the sense of colour, by using coloured paper to cover the articles made. For girls crochet work is added to knitting. The culture-ideal of this epoch is the rearing of domestic animals. Humanely valuable is the thought that it is man's duty not to mis-handle animals, *i.e.*, not to treat them inhumanely. This produces in the school the idea of the protection of animals, and the children cannot too early learn this lesson. This protection of animals requires a large number of petty cares, *e.g.*, the building of cages for house-birds (an occupation, it is true, reserved to a later age), and the feeding of birds in winter. In this latter occupation girls may make themeselves very useful.

The epoch of agriculture requires new and important manual tasks; in this epoch of settled cultivation we connect our work with the highest development which agriculture has to show, that is gardening (including fruit culture), because it most fully portrays the conquest of nature, and because in its most elementary form it can be carried on with comparatively simple means. It should take the form of a school garden to be kept in order by the children themselves, under the direction of the teacher. The garden is used partly by the whole school and partly by the teacher and the children; that is, each child has its own plot under its sole control. Gardening includes the care and rearing of plants, the protection of animals useful for the garden, and the exclusion of those that are harmful, the observation of the weather, biological observations of plants and animals, examination of the nature of the soil, care of the soil, and other related manual occupations, especially woodwork adapted to the needs of the country, employing not the carpenter's bench, but the so-called carving board and knife. Some occupations must be done by all the children at the same time—*e.g.*, the tending of their garden plots; others require to be done each time by a single individual—*e.g.*, the current tasks of observation. The latter are, as far as possible, to be organised socially, that is, the children are to form a company of workers, where each member has to perform the work in turn, and where each, so soon as his turn comes, is conscious that the honour of each individual member of the company is the honour of all, and that the whole suffers if even an individual on one occasion neglect his duty. It is impossible to rate too highly the value of gardening. It moulds the will of the pupil by teaching him through the very nature of the work to be faithful in small matters, to be patient, to exercise diligence, to hate idleness, to despise hunger, thirst, and fatigue, and, if the work is pressing, to persevere under all circumstances till it is finished, to be careful, neat, and orderly;

in fact, a number of good qualities very valuable in practical life. Hastiness, carelessness, fittulness, untidiness, disorder, and other defects would soon bring their own reward in gardening.

This occupation also trains the feelings, especially in their highest forms; the æsthetic feeling by the multifarious inspirations which the pupil receives in his intercourse with all the beauties that the gardens offers to eye and ear; the feeling of sympathy in so far that in a proper organisation of the youthful community of labour the more advanced, stronger, and cleverer have plenty of opportunity to make themselves useful to the most backward, weaker, and slower workers; the social feeling, as mentioned above, by bringing the children to feel that the honour of the individual is the honour of all, and that the duty of each member is to constantly think of the common good; lastly, the religious sentiment, since the sensuous observation of nature and all the wonders of the garden world, must gradually awaken in the unspoilt child a faint perception of the connectedness of all natural phenomena, of the existence of a superior intelligence which arranges all things in a perfect system, and, even without a single word of religious instruction, fill him with a shuddering wonder, which in itself is the truest and deepest religion—for "Gefühl ist alles, Name ist Rauch und Schall, umnebelnd Himmelsglut" (Goethe). In human development, agriculture has always been a teacher of religion, we may say *the* teacher.

Besides the will and the feelings, gardening builds up in the most powerful way the child's world of ideas. It enlarges his knowledge of nature, and gives him valuable opportunities for observing the inter-dependence of all natural objects. Important chapters in the theory of the nourishment of plants, the Physics, Chemistry and Mineralogy of the soil, Botany and Natural History and Weather-lore, can be treated in quite elementary fashion, and from direct observation. And this not learnt from books, which can only too easily falsify Nature's likeness, but connected with the outdoor work of the children and their intercourse with living Nature, not with the stuffed objects of the Museum, and the dry straw of a collection of plants. And so justice is done to the biological tendency, which is rightly winning for itself a larger admission to the schools; and, last of all, there is intercourse with Nature as a whole—not Nature torn to pieces to fit the pigeon-holes of our scientists. Gardening deepens the insight of the child into one important sphere of social life, viz., agriculture, and so into circumstances which, as was stated above, are of extreme importance for the proper comprehension of History. There are still a few additional reasons which seem to give gardening the pre-eminence among those kinds of manual labour which can be organised educatively. It can be carried on almost exclusively in the open air: is, therefore, as Gladstone says in its praises, a healthy and inspiriting occupation, which also affords recreation and a complete change from work, and admits in quite natural fashion, in consequence of the variety of its tasks, the employment of both sexes. If school gardens of a strictly

educational character were made an integral part of school education we should have approached considerably nearer to the ideal of education suitable to our nature, age, and civilisation.

As far as time allows, the other occupations should not be neglected. Clay-modelling and cardboard-work should be continued. In addition, clay-carving might be introduced. It permits a particularly rapid production of bodies with regular surfaces, and serves as an excellent introduction to the elementary study of crystalline forms, in so far as it is possible to produce one crystal shape from another by cutting off the edges or corners at a certain angle.

For illustrating the economic principles of the last two epochs, that of the age of crafts and guilds, and that of free industry with machine power, it is hard to find a form adapted to the school. The solution might possibly be found for the first period. Here the elements might be made clear, either by letting the pupils test, by their own work, some of the most important materials, or by showing the children the processes of other manual occupations which cannot be carried on in the school.

The necessity of a series of visits of observation, side by side with the instruction, has been frequently the subject of comment. On the other hand, the school, with its rudimentary equipment, is in no way able to introduce anything similar to modern machinery. And yet it is not only important that the young should have an idea of this, but also that it should be gained by their own work. If one considers that the great development of modern industry stands in direct connection with the progress of Chemistry and Physics, one is forced to the demand that the introduction to the sphere of work of the last epoch shall take the form of conducting easy experiments in Natural Science. All arrangements necessary for this purpose may be expressed by the term school laboratory, which name shall be taken to mean no more than that opportunity shall be given to the pupils to attempt, under the supervision of the teacher, but otherwise in full independence, easy experiments in Natural Science with simple apparatus.

In the school workshops two fields of work claim consideration before all others—that in wood and metal, because these are the two most important materials of industry. Cardboard-work may cease at this stage. Clay-modelling, on the contrary, should be continued up to the highest class, because, together with Drawing, it is the only representative of the "art of space," and, as a rule, æsthetic training is much neglected.

The laboratory will certainly play a great part in the school of the future, not only in the higher, but also in the elementary schools. A glance at modern English and American schools shows how backward we still are in Germany. There, arrangements, which allow each pupil to conduct experiments for himself, are much commoner than with us. The Home Experiments, also, point in the same direction. Side by side

with the laboratory work the exercises in the workshops must be continued; they are necessary for the acquirement of the requisite technical skill for making the apparatus.

The occupations for girls in the last two stages are connected with those that have long been customary in girls' schools. The needs of simple housekeeping are the determining element. Sewing, cutting out, marking, darning, mending, and fancy work are practised.

The nearer the time comes for leaving school, for those pupils in whose future calling manual labour will play the chief part, this branch of school instruction must pay greater attention to this future calling; but not in a one-sided "technical" direction (as is necessary in the training of apprentices), that is, not confining the attention to one particular calling, but rather devoting it to a general course of technical instruction in the employment of some important materials (wood and iron), and in the use of the most important tools. Above all a cardinal distinction must be made in this matter between the needs of the rural labourer and the town artisan.

For the rural population, the treatment of the last two stages must be modified. Here handicraft and industry can only be considered as far as they have relation to agriculture, which can thus be more fully treated. For the future craftsman, the stage of the crafts and guilds should be correspondingly fully treated, while the last stage would only touch on certain points useful to the craftsman (*e.g.*, the various machines used in handicrafts). But for the future artisan, the consideration of the stage of agriculture must not be curtailed; it is too important for the comprehension of the general development of civilisation.

In conclusion, the points which the author has desired to emphasise may be summarised in the three following propositions:—

(1.) The guiding principle in drawing up the curriculum of instruction for the school, both for the Humanities and for the Mathematical and Natural Science Branches, must be the development of human civilisation.

(2.) To this scheme should be added exercises in Manual Occupations, their nature and extent being determined by the curriculum.

(3.) In the upper classes of those schools in which the pupils belong to the working classes, so much attention must, at least, be paid to the future calling that a distinction is made between the needs of the town and the country; this distinction must also be recognised in Manual Instruction.

OTTO W. BEYER.

Leipzig.

THE SECONDARY SCHOOLS OF SWEDEN.

There are two circumstances which make the difference between the Secondary Schools of England and those of Sweden specially marked, and which should be noticed at the outset.

While a considerable number of the English Secondary Schools have been founded and developed by private initiative, without being instituted or controlled by the Legislature in any way, those in Sweden have been founded by the command of our great King Gustavus Adolphus, and have undergone many changes from different series of royal decrees. It must not be understood by this that there were no secondary schools in Sweden before the time of this king, for such schools were already in existence in the middle ages; but our present schools have developed directly from his initiative, and have no organic connection with those existing before his time.

Another essential difference is that the Swedish language is used only by some five millions of people, whereas English is, for practical purposes, useful all the world over. This fact enhances the importance of modern language teaching in Swedish Secondary Schools.

By far the most important class of secondary schools in Sweden are the State Public Schools for boys. When complete they consist of nine classes, called respectively, the 1st, 2nd, 3rd, 4th, 5th, 6th (divided into 6—1 and 6—2), and the 7th (divided in the same way). The pupil remains in each class for one year; but, if he has not acquired sufficient knowledge within that time, he may be required to pass another year in the same class. In the three lower classes the curriculum is uniform for all scholars; but from the 4th upwards there are two divisions; the "real" (modern) side, and the "Latin" (classical) side. Subsequently the classical side in the Lower Sixth is divided into two divisions, the "A" Division, with Greek, and the "B" Division, without Greek.

In most Swedish towns there are secondary schools, 46 per cent. of which are complete, some of these, however, only including one of the two principal divisions, *i.e.* the "real" or the "Latin." The remaining 54 per cent. are incomplete, four or more of the higher classes being excluded.

In these schools 3·4 per cent. of the boys of the country, between the ages of 10 and 18, are taught.

The following statistics are taken from the "Berattelser," 1895-96, published by the Ecclesiastical (and Educational) Department.

The following Table shows the percentage of pupils in the different classes:—

(Class I. is the bottom of the School.)

—	Class I.	Class II.	Class III.	Class IV.	Class V.	Class VI.-1.	Class VI.-2.	Class VII.-1.	Class VII.-2.
Percentage	14·0	17·0	17·1	15·7	12·6	8·0	6·3	5·4	3·9

The small percentage in the higher classes (VI.—1, VI.—2, VII.—1, VII.—2) is principally owing to the fact that many pupils leave school before the end of the school course to enter either private or technical schools, or to take up the practical business of life.

The following Table shows the percentage of pupils attending in each class named—α, the Modern side; β, the Latin Side; γ, the "A" Division of the Latin Side; δ, the "B" Division:—

Class.	α Modern Side	β Latin Side.	Of those on the Latin side.	
			γ "A" Division (with Greek).	δ "B" Division (no Greek).
IV.	63·6	36·4	—	—
V.	57·1	42·9	—	—
VI.—1.	44·6	55·4	37·0	63·0
VI.—2.	40·4	59·6	38·9	61·1
VII.—1.	37·0	63·0	35·5	64·5
VII.—2.	31·8	68.2	31·4	68·6

The numbers in the "B" Division have of late years been smaller owing to the increase (especially in Mathematics) of the courses for that Division.

The school year begins at the end of August and finishes at the beginning of June. It is divided into two terms, the autumn and the spring, with a break of at least three weeks' vacation at Christmas. The year's course extends over 36 weeks, including one week's vacation at Easter, half a week at Whitsuntide, and certain holidays granted by the individual head masters.

The age of admission into State Schools is nine years. For admission into Class I. the Educational Code requires—

A. Correct and fluent reading of the Swedish language, and ability to reproduce the gist of some simple narrative.

B. A clear handwriting, together with some skill in orthography.

C. A knowledge of the outlines of Bible History, acquired from a short manual used in schools; a fuller knowledge as far as the Book of Kings; the text of Luther's Shorter Catechism, and his explanation of the first part; the Introduction and First Part of the adopted Greater Catechism; and at least 20 verses of hymns.

D. Readiness in the application of the first four rules of Arithmetic, with four figures (multiplication and division with two figures only), some practice in the use of weights and measures, and some skill in mental arithmetic.

E. The outlines of the geography of Scandinavia; situation and boundaries of the Swedish provinces; with a more detailed knowledge of either the south, centre, or north of Sweden; and a general knowledge of the geography of the world.

F. Knowledge of a few types of animals, as an introduction to Zoology.

For admission into any higher class the pupil must have attained the standard of the class below.

The knowledge required for admission is gained by the pupils in private or public elementary schools, or by home teaching.

The curricula of the Modern and Classical sides laid down by the Swedish Educational Code are as follows:—

Curriculum for the Modern Side.

A. Number of Lessons every week in each branch of instruction.

Branch of Instruction.	Class								
	I.	II.	III.	IV.	V.	VI. 1.	VI. 2.	VII. 1.	VII. 2.
Religious Instruction	3	3	3	2	2	2	2	2	2
Mother Tongue	5	5	6	4	3	2	2	2	2
Writing	2	2	1	–	–	–	–	–	–
Composition in School	–	–	–	–	–	3	3	–	–
Geography	2	2	3	1	1	} 3	3	3	3
History	2	3	3	3	3				
German	6	7	6	4	3	1	1	1	1
English	–	–	–	6	6	3	3	3	3
French	–	–	–	–	3	4	4	4	4
Mathematics	4	5	5	5	4	6	6	7	7
Natural Science	2	2	2	3	3	–	–	–	–
Natural History	–	–	–	–	–	1	1	1	1
Chemistry	–	–	–	–	–	2	2	2	2
Physics	–	–	–	–	–	2	2	3	3
Introductory course in Philosophy	–	–	–	–	–	–	–	1	1
Drawing	1	1	1	2	2	3	3	2	2
Gymnastics	3	3	3	3	3	3	3	3	3
Fencing	–	–	–	–	–	2	2	2	2
Singing	2	2	2	2	2	2	2	2	2
Total	32	35	35	35	35	39	39	38	38

[Home work is not included in the above figures.]

B. Distribution of the branches of instruction in the different classes.

CLASS I.

Religious Instruction.—Sacred History: the Old Testament; Catechism: repetition of the first part and of the first articles of Faith; reading of the Bible in connection with Sacred History and Catechism; selection of Hymns.

Swedish (Mother Tongue).—Reading and explanation of selected pieces, especially in the Sagas; History and Geography

of the North; together with practice in the reproduction of the contents of tales and descriptions previously read by the pupil, or given orally by the teacher; these lessons are also used as exercises in pronunciation and reading. Grammar, the same as that taught in the German lesson; practice in construction of sentences and in spelling on the basis of the adopted principles of orthography.

German.—Practice in pronunciation and reading; declension of substantives, adjectives, personal and possessive pronouns, conjugation of auxiliary and regular verbs in the active voice, together with oral and written exercises, practice in distinguishing the various parts of speech and in the analysis of simple sentences; constant comparison with the mother tongue; elementary exercises in conversation.

History.—Tales from National History up to the commencement of modern times, given orally by the teacher with the aid of a school manual for the pupil.

Geography.—Sketches of the continents and the oceans as shown on the globe; the geography of Sweden; the elements of the physical and political geography of Europe.

Mathematics.—Arithmetic; the first four rules, using whole numbers, with a little practice in the use of decimals; the application of these rules to weights and measures; mental arithmetic.

Natural Science.—Preliminary notions of the animal kingdom, embracing some general ideas of the human body, and types of mammals.

CLASS II.

Religious Instruction.—Sacred History: the New Testament; Catechism; second and third Articles of faith; reading of the Bible as in Class I.; selection of hymns.

Swedish (Mother Tongue).—Reading and explanation of selected pieces, with practice in oral reproduction of tales and descriptions previously read by the pupil, or given orally by the teacher as in Class I.; recitation of simple poetical pieces learnt by heart; grammar, corresponding with that taught in the German lesson; practice in the construction of sentences; orthography and punctuation.

German.—Practice in reading; the pronouns not dealt with in Class I.; the remaining forms of the regular verbs; conjugation of such irregular verbs as occur in the reading pieces; the commonest particles; oral and written application; together with practice in distinguishing the various parts of speech, analysis of simple sentences, and of the easier forms of the compound sentence; constant comparison with the Mother Tongue; practice in speaking.

History.—Continuation of the History of Sweden to the death of Charles XII., as in preceding class.

Geography.—Physical and political geography of the countries of Europe, continued.

Mathematics.—Arithmetic: the first four rules with fractions; practice in weights and measures; mental arithmetic.

Natural History.—Preliminary notions of the types of mammals and birds; observation of flowering plants, selected with regard to their external organs; excursions, for instruction in the collection and preparation of plants.

CLASS III.

Religious Instruction.—Sacred history: Repetition. The third part of Luther's Catechism, and the fourth part commenced; reading of the Bible as in Class II.; selection of hymns.

Swedish (Mother Tongue).—Reading and explanation of selected pieces in prose and verse, with more careful observation of the rhythm and correct pronunciation; practice in the oral reproduction of the pieces read; recitation of simple poetical pieces; accidence, and the most important parts of syntax, from a short manual; analysis and formation of sentences; orthography concluded; practice in orthography and punctuation; now and then a simple composition in the school-room under the guidance of the teacher.

German.—Reading of easy pieces; accidence more fully and systematically treated; the important parts of the syntax orally taught; practice in oral and written exercises; lessons in speaking.

History.—The history of Sweden to the present time.

Geography.—The rest of the geography of Europe; physical and political geography of the world commenced.

Mathematics.—Arithmetic: Fractions and their application to weights and measures concluded, and repetition given; proportion and simple problems in percentage and calculation of interest; mental arithmetic.

Geometry.—Object lessons; the application of strict geometrical proof to some simple problems.

Natural Science.—Short survey of the types of the cold-blooded vertebrates; repetition of the preceding course; observation of flowering plants continued, and some practice in the definition of plants according to their characteristics; summary of the external organs of plants; excursions for the collection of fifty of the commonest plants, under the guidance of the teacher.

CLASS IV.

Religious Instruction.—Bible reading: one of the Gospels Catechism; Part IV., finished. Part V., repetition of Part I.

Swedish (Mother Tongue).—Reading (with expression) pieces of modern Swedish literature, together with sketches of the life, &c. of the authors, and any explanations necessary with regard to the prosody; recital of national pieces learnt by heart; syntax and punctuation; exercises in orthography. Every fortnight a written reproduction of a tale previously read, or an essay on an easy subject (prepared with the help of the teacher) written either at home or at school.

German.—Reading of easy continuous pieces; the accidence more completely; the principal parts of syntax with application; practice in speaking. Every fortnight a translation into German written either at home or at school; practice in speaking.

English.—Practice in pronunciation and reading; accidence, together with oral and written exercises; practice in speaking.

History.—The history of the world from a short manual; repetition of the national history commenced.

Geography.—Geography of non-European countries continued and finished.

Mathematics.—Arithmetic: percentage and interest completed; partnership; calculation of areas and volumes.

Algebra:—The first four rules, using whole numbers; fractions commenced.

Geometry:—The properties of lines, angles, triangles, and parallelograms.

Natural Science.—Short survey of the types of invertebrates; termination of flowering plants, in order to increase the pupil's knowledge of the general structure of the plant, and partly with a view to teaching him the divisions of species, genera, and families; the classification of Phanerogams; excursions for the collection of fifty of the common plants; natural phenomena; with explanations of our planetary system and stellar system.

CLASS V.

Religious Instruction.—Bible reading: the Acts of the Apostles; Catechism; Catechetical instruction on the last four Parts.

Swedish (Mother Tongue).—Reading as in Class IV.; oral practice, with particular attention to the correctness of expression; comprehensive survey of the course read in grammar; exercises in orthography; composition, the arrangement of materials and outlines of essays. Every fortnight an essay or translation as in Class IV.

German.—Reading of selected authors, the syntax more fully learnt, repetition of grammar, and practice in application; practice in speaking. Every fortnight a written translation into German as in Class IV.

English.—Reading of easy continuous pieces; repetition of the accidence and of the general rules of the syntax applied in oral and written exercises; practice in speaking.

French.—Practice in pronunciation and reading; general rules of accidence, together with oral and written exercises; preparatory speaking lessons.

History.—History of the world as in Class IV., concluded and repeated; repetition of the leading events in the National History brought to a close.

Geography.—Repetition of the course of preceding classes.

Mathematics.—Arithmetic: repetition of the arithmetical course. Algebra: fractions continued and concluded, easy equations of the first degree with one unknown, and solution of problems.

Geometry:—Circles and polygons; simple problems.

Natural Science.—Repetition of zoology; examination of the flowering plants as in Class IV.; short survey of the vegetable kingdom; excursions; collection of 50 common plants; ordinary chemical phenomena; outlines of geology.

CLASS VI.—1.

Religious Instruction. — Bible reading, especially the poetical and prophetical books of the Old Testament, and the Epistles in the New; Church history of the Early Ages and that of the Middle Ages begun.

Swedish (Mother Tongue).—Reading of selected authors in Swedish literature combined with a short history of literature; oral practice; recitation; practice in the arrangement of materials in outlines of essays. Every fortnight an essay prepared with the help of the teacher, or translation from a foreign language done either in school or at home.

German.—Reading of selected authors, partly at sight; practice in speaking.

English.—Reading of the more easy modern authors; partly at sight; grammar learnt more fully, and applied in written and oral exercises; practice in speaking. Every fortnight a written translation into English, done either at home or in school.

French.—Reading of easy series of pieces; brief but systematic treatment of the accidence with oral and written exercises; practice in speaking.

History and Geography.—History of the world in modern times, from a fuller manual, to the year 1648. National history, from a fuller manual, from the beginning of modern history to the accession of Charles X.

Geography.—Learnt more fully: European geography begun.

Mathematics.—Algebra: powers and roots; proportions; equations of the first and second degree, with one unknown; problems.

Geometry:—Geometrical exercises; amplification of the preceding course.

Every fortnight an exercise to be done in school.

Natural History.—The most important "families" with special regard to their morphology and life-history, and their use to man. Systematic observation of flowering plants; collection of 50 plants.

Physics.—General properties of bodies; equilibrium of solid, liquid, and gaseous bodies.

Chemistry.—Introduction, and some of the metalloids.

CLASS VI.—2.

Religious Instruction.—Bible reading as in VI.—1; Church History; the Middle Ages finished, and modern history begun; fundamental truths with regard to the doctrine of faith and morality from a short manual, with references to the Holy Scriptures and History of the Church.

Swedish (Mother Tongue).—Reading as in VI.—1, pieces of

Danish and Norwegian literature; oral practice as in VI.—I; practice in arrangement of material for composition. Every fortnight an essay or a translation as in VI.—1.

German.—Reading of selected authors, partly at sight; practice in speaking.

English.—Reading of selected modern authors, partly at sight; grammar in connection with the correction of the essays; practice in speaking. Every fourth week a written translation into English done in school.

French.—Reading of selected authors. The principal parts of the syntax applied in oral and written exercises; practice in speaking. Every month a written translation into French, done in school.

History and Geography.—The history of the world as in Class VI.—1, continued to the French Revolution; National History as in VI.—1, continued to Gustavus IV.; European geography finished.

Mathematics.—Algebra: equations with more than one unknown; problems; powers (logarithms) and series.

Geometry:— Proportion, applied to geometry; problems, especially in plane mensuration.

Every other week a mathematical exercise, done sometimes at home, sometimes in school.

Natural history: human anatomy, together with instruction in hygiene; comparative description of the systems of animals, together with repetition of preceding courses; the more important families of the phanerogams and examination of flowering plants as in VI.—1; collection of 50 plants.

Physics.— Heat; Magnetism and Electricity; problems: Chemistry:—Metalloids and light metals.

CLASS VII.—1.

Religious Instruction.—Bible reading as in Class VI.; Church History, concluded; the doctrines of Faith and Morality as in VI., finished.

Swedish (Mother Tongue).—Reading as in Class VI., pieces from Norwegian and Danish literature; practice in oral discourse; recitation; lectures; practice in arrangement of materials for essays; every month an essay written, sometimes at home, sometimes in school.

German.—Reading of selected authors, partly at sight; practice in speaking.

English.—Reading of selected authors, partly at sight; grammar in connection with the reading matter; practice in speaking; every month a written translation into English, or an essay in English, sometimes written at home, sometimes in school.

French.—Reading of selected authors, partly at sight; systematic summary of the syntax in connection with the oral and written exercises; practice in speaking; every fortnight a written translation into French, done sometimes at home and sometimes in school.

History and Geography.—Universal history continued down to the present time; National history continued down to the present time; geography as in VI.—2, non-European countries.

Introductory course in philosophy: psychology; logic.

Mathematics.—Compound interest; plane trigonometry; stereometry; analytical geometry commenced; geometrical problems; every fortnight a mathematical exercise, done sometimes at home, sometimes in school.

Natural history: anatomy and physiology of the human body, together with the most important rules of hygiene; comparative description of the systems of animal organs, together with repetition of preceding courses; survey of the larger group of cryptogamic plants, with special reference to their importance to man.

Physics.—Continuation of the course of the preceding year, optics and acoustics; problems; an exercise in Physics every four weeks, done sometimes at home, and sometimes in school.

Chemistry.—The heavy metals.

CLASS VII.—2.

Religious Instruction.—Repetition of Church History, and the doctrines of Faith and Morality.

Swedish (Mother Tongue.)—Reading as in VII.—1; practice in oral discourse as in VII.—1; exercises in arrangement of materials and outlines of essays; every four weeks an essay as in VII.—1.

German.—Reading at sight of selected authors; practice in speaking.

English.—Reading of selected authors, partly at sight; repetition of grammar in relation to the oral and written exercises; practice in speaking. Every month a translation into English or an English essay, written sometimes at home and sometimes in school.

French.—Reading of selected authors, partly at sight; repetition of grammar in connection with the oral and written exercises; practice in speaking; every fortnight a written translation into French, done sometimes at home and sometimes at school.

History and Geography.—Universal history, from the beginning of modern times; repetition of national history, beginning with modern history; outlines of Swedish politics.

Short review of the geographical course.

Introductory course in Philosophy.—Psychology, Logic.

Mathematics.—Analytical geometry; recapitulation of the mathematical course, especially by means of problems.

Every fortnight a mathematical exercise, worked sometimes at home and sometimes in school.

Natural history:—the most important points in the inner structure and the physiological processes of plants; repetition.

Physics.—The elements of dynamics; problems; repetition, especially by means of problems; every month an exercise, done sometimes at home and sometimes at school.

Chemistry.—The first principles of mineralogy and geology; repetition.

The aim of the exercises in Mathematics and Physics is not only to lay a good foundation for the knowledge of these sciences, but also to develop the pupil's faculty of giving expression to his thoughts in a correct form, great importance being attached to the language used in the solution of problems. In the chemistry lessons, the pupils are allowed not only to see the teachers' experiments, but also to make synthetical and analytical experiments themselves, either in the hours allotted to chemistry or optionally in certain hours besides, but with regard to Physics, the allotted time does not admit of much experiment on the part of the pupils themselves.

Writing of essays, etc., in the schoolroom in VII.—1 and VII.—2 may take place in ordinary school hours by permission of the head master.

Curriculum for the Latin Side.

Number of Lessons per week allotted in each Class to each Branch of Instruction.

Branch of Instruction.	CLASS.											
	I.	II.	III.	IV.	V.	VI. 1.		VI. 2.		VII. 1.		VII. 2.	
						A.	B.	A.	B.	A.	B.	A.	B.
Religious Instruction	3	3	3	2	2	2	2	2	2	2	2	2	2
Mother Tongue	5	5	6	4	3	2	2	2	2	2	2	2	2
Writing	2	2	1	–	–	–	–	–	–	–	–	–	–
Composition in School	–	–	–	–	–	3	3	3	3	–	–	–	–
Geography	2	2	3	1	1	3	3	3	3	3	3	3	3
History	2	3	3	3	3								
German	6	7	6	4	3	2	1	2	1	2	1	2	1
English	–	–	–	–	–	–	3	–	3	–	2	–	2
French	–	–	–	–	3	4	4	4	4	3	4	3	4
Greek	–	–	–	–	–	6	–	6	–	6	–	6	–
Latin	–	–	–	7	7	6	6	6	6	7	7	7	7
Mathematics	4	5	5	5	4	3	4	3	4	3	5	3	5
Natural Science (Elementary).	2	2	2	3	3	–	–	–	–	–	–	–	–
Natural History	–	–	–	–	–	–	1	–	1	–	1	–	1
Physics	–	–	–	–	–	1	1	1	1	2	2	2	2
Introductory course in Philosophy.	–	–	–	–	–	–	–	–	–	1	1	1	1
Drawing	1	1	1	1	1	–	2	–	2	–	1	–	1
Gymnastics	3	3	3	3	3	3	3	3	3	3	3	3	3
Singing	2	2	2	2	2	2	2	2	2	2	2	2	2
Fencing	–	–	–	–	–	2	2	2	2	2	2	2	2
Total	32	35	35	35	35	39	39	39	39	38	38	38	38

[Home work is not included in the above figures.]

The distribution of the branches of study on the classical side is not given in detail in this paper. The preceding Table indicates the main features of the classical course, the scope of which is defined in the code in a manner similar to that fully shown in regard to the modern side above. But it is necessary to notice a

few points which are not indicated at first by a mere comparison of the hours allotted to the different branches. As neither progressive nor conservative teachers are satisfied with the present position of classical instruction, a full account of the modern course only has been given. In classes IV. and V. on the Latin side, ancient history is learnt instead of universal history. In VI. the code prescribes translation from Swedish into Latin, in VII. 1, from Swedish into Latin and *vice versâ* alternately, in VII. 2, translation from Latin into Swedish; and in the A. course translation into German or essays in German, and in the B. course, mathematical exercises. French exercises only are written in VII. on this side, Swedish essays as on the modern side. In Mathematics, Analytical Geometry and Stereometry are not learnt, and in the A. course the amount of mathematical study is more reduced. Physics are treated more briefly in the classical than in the modern course, as the number of hours given to this subject is so much smaller in the former: the time given to the solution of problems and to dynamics is specially reduced.

The only optional branch introduced by the code, is English in the A. course. All other branches are obligatory. Pupils of other confessions than that of the State Church, however, are exempted from attending the religious instruction if so desired.

Examinations do not play the same part in Swedish as in English schools. At the end of each term the pupils are given certificates, not for knowledge shown in any examination, but for that exhibited during the term. At the close of the school year an examination day is held. This, however, partakes more of the nature of a "show-day" than of an examination in the strict sense. On this day all persons interested in the school, either in an official capacity or as parents or guardians of the boys, or from other motives, are invited to be present at the lessons given, and to inspect the essays and translations written by the boys, the statement of the year's work, and the schedules of statistics concerning teachers and taught, which are drawn up by the head master and afterwards printed for distribution. The function concludes with a distribution of prizes, certificates, and exhibitions.

The ordinary certificates are awarded by the masters on the marks obtained by the pupils during the year. In all branches in which written work (*e.g.*, essay, translation, &c.) is required by the Code, the boys have test-papers set them periodically to be worked under the supervision of the master: special importance is attached to the final test-paper at the end of the school year.

In the five-class schools a "leaving examination" is held in the top class at the end of the spring term; no great importance, however, is attached to it. On the other hand, the examination for the "Leaving Certificate" at the seven-class schools is a highly important test. The Government appoints a number of "Censors" (usually University Professors) to participate in the conduct of this examination. The candidates are examined both by written work and orally. The written examination lasts from four to six days, and is held on the same dates at all the schools throughout the kingdom. The papers are set by the Head of

the Ecclesiastical (and Educational) Department in accordance with the suggestions of the Censors. The working of the papers takes place at the different schools under the supervision of such of the staff as the head master may appoint.

The following written work is required from a pupil in the classical division:

"An essay in Swedish on any given subject which comes within the curriculum of the school. It must be written correctly and show a logical arrangement and development of the subject matter.

"A translation from Latin into Swedish, which must show an appreciative grasp of the subject matter of the text, and the ability to render it into correct language; and, besides, any scholar in the A. course must make a translation from Swedish into German and from Swedish into French, which translations must show a clear knowledge of the general laws of the language. A pupil in the B. course must make a translation from Swedish into French or German (either is optional) showing a thorough knowledge of the language, and a mathematical paper containing a satisfactory solution of three problems."

The following is required of a scholar belonging to the modern division:

"An essay in Swedish on any subject which comes within the curriculum of the school, written in correct language, and containing a clear arrangement and development of the subject matter.

"A translation from Swedish into English and from Swedish into French (German, if preferred, may be substituted for either English or French); the translations must show a grasp of the general laws of the language.

"A mathematical paper solving four problems in Geometry or Algebra (one at least in each). A paper in Physics, containing a solution of some mechanical or physical problem.

"In writing the Swedish essay the pupil is not allowed to make use of any help; but for the translations from Latin or into Modern Languages, dictionaries specified by the head of the Education Department may be used, but no grammars: in solving mathematical and physical problems tables of logarithms are permitted."

"Six hours are allowed for the Swedish essay and for the translation from Latin; four hours for the translation from Swedish into a Modern Language; for the mathematical papers, on the Classical Side, six hours; on the Modern Side, nine hours (on two separate days), and three hours for the Physics paper.

"The written papers shall be corrected by the masters who have charge of the various branches in the Upper Seventh Class in the school, where the examinees sit. Each separate paper shall be marked by the master who has corrected it after consultation with another master appointed by the Staff for that purpose; if a difference of opinion arises, the Headmaster (or, if he be already one of the above, a third member of the staff) shall be called in and his decision shall be final.

"Candidates on the Classical Side who have secured a 'pass' or 'honours' for their Swedish essay, for their translation from Latin, and for one other paper, are admitted to the oral examination. The same privilege may also be granted to such candidates as have only secured a 'pass' in the first two of the above-named branches and to such candidates of the B Division as shall have passed in Swedish Composition, Translation in French or German, and in Mathematics, provided that two-thirds of those masters approve who have had to teach such candidates during the preceding year in those branches which are required for the Oral Examination.

"Candidates on the Modern Side who have secured a 'pass' or 'honours' for their Swedish essay, and either for the Mathematical paper, and one of the Translations into a Modern Language, or for the Physics paper and both translations, are admitted to the oral examination. Under conditions similar to those stated above, this privilege may also be extended to such candidates as have secured a 'pass' for their Swedish essay and either for the Mathematical and Physics papers, or 'honours' for both translations into Modern Languages.

"The Oral Examination shall include the following branches of instruction:—

1. Classical Side (A. Division): Divinity, Latin, Greek, German, French, History and Geography, the Elements of Philosophy, Mathematics and Physics, and, at the option of the candidate, English.
2. Classical Side (B. Division), as above, except Greek. English is obligatory, and Natural History is added.
3. Modern Side, as above, without Latin or Greek. English is obligatory, and Natural History and Chemistry are added.

The examination concerns itself primarily with the work done in the 7th class; but its object is, not only to test the amount of knowledge possessed by the candidate in each branch, but also the degree of general culture attained by him.

In Latin and modern languages the candidates will be required to translate at sight passages from unprepared books.

The masters who teach in the Upper Seventh shall conduct the oral examination, each in his own branch; the Censor has the right of determining the length of the examination and the portion of the subject matter in which the candidate shall be examined; he may also conduct the examination himself.

The candidates are usually divided into small groups (two to six), each group being examined together in each branch for half an hour or an hour. One Censor at least must be present at every section of the examination, and from one to three representatives of the general public nominated by the Ephor.*

Any candidate who has been prepared privately for the "examination for the Leaving Certificate" must send in a written application at a stipulated time to the head master of one

* See below.

of the schools where such examination is held. The following documents must accompany every such application:—

Certificates of birth and good conduct, and statements (1) as to place of abode; (2) as to studies pursued during the last four years; and (3) as to the instruction, if any, he may have enjoyed; furthermore, if he have attended a public school during the last two years, a properly drawn-out leaving-certificate therefrom, and a statement of the division in which he desires to offer himself, and of the books he has read.

The procedure in regard to a candidate who has prepared himself privately is the same as in the case of the pupils of the school. The oral examination is held in every branch embraced in the chosen curriculum, and may be extended over two days.

All candidates on entering their names for this examination pay the sum of 20 kronor (about £1 2s.), and in the case of the supplementary examination in Latin, etc., the sum of 4 kronor (4/6). These fees are applied to covering the charges incurred for the Censors and their travelling expenses, etc. The fees are payable to the head master, who is required to remit them to the Treasury Department within a month of the day of receipt. Candidates who have been privately prepared have in addition to pay to the head master the sum of 10 kronor (11/-) before the written, and 15 kronor (16/6) before the oral examination, to be subsequently divided among those masters upon whom it devolves to examine such candidates.

Simultaneous with the leaving-examination is the supplementary examination in certain subjects for those needing such certificates.

The average age at which candidates obtain the "Leaving Certificate" is about 19½.

Candidates who have been rejected in the Spring, may offer themselves again at the end of the Autumn term; privately prepared candidates are also admitted to examination then.

Most of the schools are richly endowed; the interest of the funds goes towards providing scholarships for some of the best pupils, but most of these endowments are intended to help poor students.

The discipline, though not of a military character, is nevertheless very strict. In the lower classes caning is still, though rarely, used as a means of punishment. The physical development of the students is provided by gymnastics, which are compulsory for half an hour every day. In classes VI.—1 and VII. —2 there are in addition two hours' fencing every week, and in the autumn sixty hours' drilling, distributed over five weeks at most. Whilst this drilling is going on the pupils are exempted from gymnastics and fencing, and also some of the other lessons. Gymnastic exercises must, according to the Code, be sometimes exchanged for games and sports. In their leisure time, during the spring, the students generally play at a kind of base ball, and in winter they skate and walk in snow shoes, &c. In order to encourage this form of sport, leave is

given for one or two days in the year so that it may be indulged in freely. With regard to physical exercise, the long summer holidays, when the students lead an open-air life in the country, are most important. It is true that during the holidays they have some work to do, but still there is plenty of time allowed for out-of-door exercise.

About two hours' a week singing is compulsory, but pupils who have no taste for music may be exempted from this after one year's instruction. No pupil is forced to learn instrumental music.

All instruction is practically free, for the small entrance and terminal fees which are paid go towards the lighting and heating of the schoolrooms, the school library, prizes, exhibitions for poor students, the building fund, &c. The entrance fee is ten kronor (11/-), and the terminal fees vary according to the status of the pupils; the head-master and staff together in some cases remitting the terminal fee.

The Swedish educational code also lays down the following general rules with respect to "method," which may prove of interest:—

"1. In helping the pupil with his work the principal aim of the teacher should be to develop his individual character and ability. Without attaching too much importance to details, the teacher's exertions in the first place should be directed towards developing the self-activity of his pupils, so far as their powers will enable them, and thus to develop their minds soundly and thoroughly.

"2. During the lesson hours in school oral instruction by means of question and answer must be the chief medium for widening and strengthening the knowledge of the pupil. Manuals may be good for impressing on the memory what has already been grasped, but they ought, as far as possible, to be connected with the oral instruction. Home work should not be given to the pupils without previous preparation.

"3. Home lessons must be given sparingly in the lower classes, and only gradually increased in amount and in difficulty with the development of the bodily and mental powers of the pupils and with their capacity to work by themselves without the help of others.

"4. Wherever it can be done with advantage, object lessons should be made use of in every kind of instruction, so that the subject may be more easily grasped by the pupil. The teacher should endeavour to make the pupil express himself clearly and distinctly in his answers.

"5. The written work, a most important part of the instruction, must fall in line with the extent of the pupil's knowledge, and always aim at developing his faculties by the application and adaptation of what he has already learnt."

Object lessons are a very important help to the teacher, especially in giving lessons in mathematics and natural science. In teaching the modern languages he encourages his pupils to spend part of their time in talking about the pictures and objects in the school and about the school surroundings. The

grammatical instruction in Latin has partly given place to the study of antiquities; here again object lessons are of great importance.

In Class I. (the lowest in the school) one teacher generally takes all the branches, and in each of the three following classes four teachers at most. In the higher part of the school the work is divided among teachers according to the branches of instruction.

In order to become a teacher in the class-subjects, the degree of "*candidatus philosophiæ*" is required (this entails five subjects) or the "*licentiate*" (two subjects at least), or, for certain combinations of subjects, theological examinations. The examination for a "*candidatus philosophiæ*" requires on an average three years' study at a university; the "*licentiate*" (including the previous "*candidatus philosophiæ*" degree), eight years; the two theological examinations with preliminary examination by the faculty of Arts,* five to eight years' study at a university. Although the examination for a "*candidatus philosophiæ*" degree may suffice for an assistant mastership, the number of those who pass the higher examinations before commencing their professional life is very large. Out of those who entered the teaching profession in the autumn of 1895, the number of those who had passed the higher examination was two-thirds of the whole number.

For an upper mastership at a secondary school (a position which carries with it a better salary than that of assistant-master), besides passing the licentiate degree in certain subjects or a severe theological examination, if instruction is to be given in religion, the candidate must write a dissertaton to be publicly defended at a university. Moreover, a year's probation in at least three subjects (average 3·5) must be passed through, during which the candidate must attend the lessons of experienced teachers, and practise the art of teaching under their guidance. At the same time he must study the theory and history of education. Before undertaking this probationary year the candidate must have passed the examination for "*candidatus philosophiæ*."

To become a teacher in any of the three special technical branches of instruction (drawing, music, gymnastics), it is necessary to have passed the respective examinations of the Technical School in Stockholm, the Academy of Music, and the Gymnastic Institute.

The salary of the teacher is paid by Government. The teacher tries at first to obtain emergency work or a post as assistant-teacher at a secondary school. Payment for such emergency work is made at the rate of 1,800 kronor (£100) a year, or in some cases a little more. The salary of an assistant master is 2,000 kronor (£111) a year, rising in four quinquennial instalments of 500 kronor (£27 16s.) up to 4,000 kronor (£222). In calculating this increment the amount of time the teacher has spent as assistant is included. The salary of an upper-master begins

* In Swedish the name is: Filosofisk fakulteten—The *philosophical faculty*.

at 3,000 kronor (£167), and rises on the same scale as that of an assistant-master. The salaries of the "technical" teachers rise in a similar manner, but are smaller.

The average age of advancement to the regular post of an upper-master is 35 years, as teacher of drawing 35·8, as music master 30·7, as teacher of gymnastics 33·5. At 65 years of age teachers who have served about 40 years are entitled to a pension if, by medical certificate, they can prove infirmity or bad health. An assistant-master is entitled to a pension of 3,000 kronor (£167), and an upper-master to one of 3,600 kronor (£200).

At the head of every school is a head master. This post may be obtained by an ordinary teacher in complete secondary schools, only by those, however, entitled to apply for an upper mastership. The appointment is for a certain time, but is generally renewable at the head master's option. His duty is not only to superintend the instruction and the discipline of the school, but he also himself teaches (though for fewer hours than the other masters), administers the funds of the school, pays the salaries, etc.

The head master acknowledges as his superior the Bishop of the Diocese in which his school is situated. The Bishop, as superintendent-in-chief of schools, is termed Ephor (Eforus), In that capacity his prime duty is to see that the educational institutions under his care are discharging in a satisfactory manner the functions for which they exist. For every school in the diocese, other than those in the city where he resides, the Bishop nominates from among the members of the community who occupy the highest social position, a so-called Inspector who shall exercise, in the place of the Bishop, general oversight over the schools in his district, and shall be the Bishop's intermediary in making known his instructions, &c., to the school authorities. An inspector is not salaried, and many of them devote but little time to the duties expected of them. The inspector is usually present at examinations and at masters' meetings if any important question is on the agenda.

The Bishop and the Diocesan Education Board* appoint the teachers.

In Sweden there is no special Minister of Education: Church and School are represented in the Government by one and the same person. His department is divided into several bureaux of which one is for the secondary schools, and one for primary schools. At the head of each of these bureaux is a secretary or head of the bureau, who undertakes the inspection of the different schools.

This inspection is most important. The Secretary of the Department undertakes the inspection; he is an experienced educationalist. He attends some lessons given by each of the

* This body is constituted of: the Bishop (in Upsala the Archbishop), chairman; the Dean of the Cathedral, vice-chairman; and either, as at Lund or Upsala, the Professors of the Theological Faculty, or, elsewhere, certain of the teaching-staff (of the lectors). This does not apply to Stockholm, where the schools are practically wholly severed from the Church.

masters, examines the corrected home-work, learns from the Headmaster any requirements or wishes felt by the masters, and concludes his inspection of the school by a conference with the teachers, in which he points out anything he may have noted, and communicates advice and information if such be required.

A number of private schools are organised on the model of the public secondary schools, and most of them receive support from the Treasury.

Private schools are entitled to receive support from the Treasury in two ways: by direct grants in aid of expenses of management, and by the recognition, in the case of such of their teachers as are qualified to teach in Government schools, of their years of service in private schools. This second privilege is an important concession, for it enables a private school to command the services of a young man for a comparatively small sum, since he can count on eventually obtaining a post in a Government school with the subsequent pension, without suffering for the time spent in non-Government employ. The stipulations under which private schools can enjoy these privileges are similar to those regulating the payment of grants to girls' schools, which are explained below. The private schools that come under this category differ but little from Government schools. The few private schools differing more essentially from those of the State will be dealt with in another connection.

The terms upon which a Government grant is made to Girls' High Schools, and to Mixed Schools established in places where no public secondary school for boys exists, are as follows:—

(*a.*) That the school shall have at least a five years' course over and above all preparatory classes. The school shall moreover for the three years previous to the application for a grant (or for the whole period of its existence, if that do not exceed three years) have had a minimum average attendance of thirty pupils for the above mentioned five years' courses.

(*b.*) That the community or parish in which the school is situated, or private donors, shall subscribe at least an amount equal to the grant applied for towards the maintenance of the school.

(*c.*) That to schools as defined in (*a*) a maximum grant of thirty kronor (£1 13s.) shall be made for every pupil attending classes other than the preparatory ones, but that the total amount allotted to one school shall not exceed 3,000 kronor (£167); furthermore that every such school which has a course in Domestic Economy for its pupils shall be entitled to a special grant for that purpose up to, but not exceeding, 500 kronor (£27 16s.).

(*d.*) That a certificate from the Diocesan Education Board shall be forthcoming to certify:—

(i.) That the school buildings, etc., are hygienically satisfactory.

(ii.) That the curriculum is so arranged as to preclude the

possibility of the pupils being taxed beyond their strength.

(iii.) That a fully qualified school-doctor has been appointed.

(*e.*) That pupils to a certain number, to be fixed by the Government, shall receive education in the school, either gratis or at a fee that shall not exceed 50 kronor (£2 15s.).

When the grants for 1897–9 were apportioned it was determined that a school drawing support to the extent of 3,000 kronor (£167) should instruct 10 pupils gratis, and 15 at a maximum rate of 50 kronor (£2 15s.); for other schools receiving a smaller sum in government aid, the number of pupils required to be taken gratis or at a reduced fee stands in the same ratio to the amount thereof.

(*f.*) That an annual statement shall be forwarded to the Government, of the work done in each school-year.

(*g.*) That the school shall be subject to such control and regulations as the Government may see fit to impose.

The control of these schools is exercised by the Diocesan Education Board and the Inspector whom that Board appoints, and by a special inspection instituted by the Ecclesiastical [and Educational] Department. As in the case of the public schools it is this latter inspection which is the more important. The person who is sent down by Government to conduct it, is present at the lessons given, but does not criticise methods adopted. His duties are simply to see that the teaching is in the hands of fully qualified persons, and that thus real value is obtained for the public money here spent. Hence the chief aim of the Government inspector is to prevent these private schools, which often have to struggle against great pecuniary difficulties, from falling a prey to the temptation of endeavouring to make their way by saving money on the teaching staff, *i.e.*, by employing inferior teaching power.

Within one month after the commencement of each term, the governors of a private school must hand in to the Diocesan Education Board a return (two copies) of the teachers, male and female, on the staff, with the number of hours per week they have to teach, the curriculum pursued in the school, and a statement of the number of pupils in each class or division. The full report is sent direct to the Ecclesiastical (and Educational) Department in Stockholm at the end of the school year. It contains information on the following points:—

1. The educational aim of the school.
2. The scheme adopted for class division; also the time considered necessary for scholars of average ability to spend in each class.
3. The standard of acquirement expected from a boy or girl desiring to enter the lowest class of the school, also which class is to be considered the lowest class of the actual school (without including the preparatory classes), or, in other words, which of the divisions in the school, with reference to the attainments, &c., of the scholars, is parallel to the first (or lowest) class in the boys' public secondary schools.

4. The branches of instruction, theoretical and practical, in each class, and also the number of hours per week allotted to each subject; how far such branches are obligatory or optional.
5. The course of study during the year in each separate branch of instruction.
6. The time allotted to teaching:
   (*a*) The division of the year into terms.
   (*b*) The number of weeks' work per term.
   (*c*) The apportionment of hours during the current term,* embracing also a time table for each division for every day of the week, showing the subjects of instruction, whether theoretical or practical, together with the name of the master or mistress in charge of the class.
7. The names of the governors of the school. Furthermore the name or names of those who take the initiative in and are responsible for the conduct of the school.
8. The teaching-staff, with a statement of the number of hours per week each member has been employed during the current or just concluded term.
9. The numbers of the scholars in each class during the past three years, or for the time the school has been open if not yet three years.
10. The amount of the annual fees paid by the pupils in each class. Furthermore, an account of any extra fees that may have been charged for optional subjects if such occur.
11. A statement of income and expenditure for the past school year, including statements of the salaries drawn by the principal, male or female, and by each member of the teaching staff.
12. A description of the extent and character of the buildings used as school premises, together with a certificate from the district board of health as to their sanitary condition.

[In view of the desirability of local authorities placing some suitable premises at the disposal of schools, an account should be added of what steps have been taken by those authorities for putting matters into effect.]

13. A certificate showing the qualifications possessed by the principal, male or female, for presiding over an institution of the kind in question.
14. Documents to prove that the community or private donors have subscribed to the support of the school for the period for which a Government grant is sought, and that the amount of such subscriptions is at least equal to the sum desired in aid.
15. An attestation of the fact that a school doctor has been appointed.

* Or the term just concluded.

As a rule this report is subsequently printed, though it is not obligatory that it be so. In case it is thus made public, paragraphs 13, 14 and 15 are omitted. Furthermore, statistics, which remain constant, are not repeated year after year; it is only essential that all the points above given shall have been sent in to the Department at least once. The regulation requiring this return is a new one and has not yet been fully and consistently carried out.

A private school that prepares pupils for the examination for the "leaving certificate" can obtain Government aid on the following conditions:

1. That such new educational methods be put in practice as may eventually be applied in the public schools if they prove successful, and
2. That they fulfil the stipulations enunciated above in regard to private schools in general.

Some of these recognised private schools have characteristic features of their own. For example, to take one particular school, its distinctive marks are:

i. The obligation upon all pupils to take part in some form of physical exercise.

ii. The education of boys and girls together throughout the school course.

iii. A greater freedom in the choice of curriculum in each class.

iv. The application of the so-called "Imitative Method" in modern language teaching.

In the case of another private school the characteristic features are:

i. The employment of Latin as the basis of language teaching.

ii. A not inconsiderable reduction of the number of hours of instruction as compared with the public schools.

iii. The introduction of manual training and Sloyd in seven of the classes.

Again, there is a third private school (at Upsala) which is a boarding-school. It is intended for youths of poor circumstances who are destined for the Church.

The first of the above three private schools receives an annual grant of 8,000 kronor (£444) from Government, each of the other two 6,000 kronor (£333); all three have the advantage that their teachers can count their years of service (see above). At these three schools, and at three private girls' schools, receiving each 3,000 kronor (£165) in annual Government grant, and in one other boys' school, the examination for the "Leaving Certificate" is held.

Special coaching (or cramming) classes for the examination for the "Leaving Certificate" exist apart from the regular school-system; they are organised for pupils who have been dismissed for some reason or other from the public secondary schools and for those who imagine they can arrive at their goal more quickly by this means. The methods adopted are necessarily only

directed towards instilling facts for examination purposes. Such institutions do not receive any grant from Government, nor are they subjected to any sort of control or inspection. The pupils prepared by them can offer themselves for the examination as "privately prepared students" at such of the public schools as the Education Department may appoint.

A short time ago a school was founded and endowed by an Englishman, Mr. William Olsson, which deserves special notice, inasmuch as it is the only boarding-school open to the general public (*i.e.*, for pupils who are *not* intending to go into the Church). It is situated in the country (in the province of Värmland) and numbers among its pupils both English and Swedish boys. The purpose in view is the acquirement by the pupils of each other's Mother Tongue; at meal-times and in class the two languages are used alternately. Only when English, Swedish and History are taught, are the pupils divided according to their nationality. An Englishman has charge of the English teaching, a German teaches German, while Swedes have the other subjects of the curriculum in charge. Shorthand, book-keeping, and Sloyd are obligatory subjects.

The main point with regard to the Secondary Schools for Girls, is that the education given in them is decidedly literary; but the dead languages are not taught in them. Some schools, however, where the pupils may take the examination for the "leaving certificate," are an exception to this rule. In some schools the language instruction is based on French, in some on German. These schools, being private schools, are not bound by any special code, and have no common curriculum. One of them receives an allowance from Government, viz. the Model School at Stockholm; and upon this the rest of the schools are more or less modelled. The curriculum of this Model School deserves a place here.

Branches of Instruction.	Classes.							
	1.	2.	3.	4.	5.	6.	7.	8.
Religious Instruction	2	2	2	2	2	2	2	2
Mother Tongue	4	4	4	3	4	3	4	4
Geography	2	2	2	2	2	1½	1	–
History	2	2	2	4	3½	3	3	3
German	–	–	–	*3	*2	*2	*2	*2
English	–	–	–	–	–	*2	*3	*2
French	6	6	6	5	4½	4½	4	5
Mathematics	2	2	2	2	3	3	†3½	†4
Natural History	–	1	2	1	1	2	3	4

* Optional. † One hour geometry, optional.

There is a special college at Stockholm for the training of female secondary teachers. There are also private secondary schools for boys and girls mixed, but they are not very common; whereas, in the primary schools, especially in the country, both sexes are usually taught together.

From what has been said it will be clear that private schools

in Sweden derive great advantage from coming under the supervision of the Government, while any direct disadvantages of such control hardly exist. Hence private schools in general, from whatever cause they spring up, endeavour as soon as possible to qualify for the grants set apart by the Government for the encouragement of such enterprises.

Technical schools, training colleges for elementary teachers, agricultural schools, peasant high schools, etc., must be classed as "special" schools, and are omitted here. The large class of technical evening schools come directly above the board schools. They receive support from the State, and are, moreover, maintained by the towns in which they are established. Even very small towns are provided with schools of this class.

Among the numerous reforms of organisation earnestly demanded is the lengthening of the school terms and the formation of a concluding class to follow Class V. in the modern course; this new class is intended for all those who wish to enjoy instruction at the public secondary schools without being forced to undergo the final "leaving examination." It is also desired by many persons that the study of Latin could be postponed till Class VI.—1. The wish of others is that the curriculum of the public secondary schools should be reorganised so as to follow immediately after that of the primary schools; the friends of Latin, however, object strongly to this reform, unless grammar schools are provided in which the study of Latin would continue to form the foundation for other languages.

Otto Gallander.

Hudiksvall, Sweden,

ELEMENTARY EDUCATION IN THE GRAND DUCHY OF FINLAND.

By the Baron Doctor Y. K. Yrjö-Koskinen.

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ANALYSIS.

I.—The Early History of the People's Schools.

1. The beginning of popular education in Finland.
2. Circulating schools.
3. Developments in 1856.
4. Uno Cygnaeus begins his work.
5. The origin of the present regulations of the people's schools.
6. The establishment of training colleges for primary teachers.
7. The progress of the Board Schools during the last decade.

II.—The Primary School in Finland as Now Existing.

1. General outlines.
2. The lower elementary school in country districts.
3. The infant school.
4. The school year and the working hours of the school.
5. The programme of instruction in the Higher Board School. (*a*) General. (*b*) Religion. (*c*) Mother tongue. (*d*) Arithmetic and Geometry. (*e*) Geography. (*f*) History. (*g*) Natural science. (*h*) Manual work. (*i*) Gymnastics. Singing and Technical Subjects.
6. Plan of instruction in schools with only one teacher.
7. The Central Authority for the schools.
8. The position and salary of the teachers.
9. The cost of the schools.

III. The Training of Teachers.

1. Conditions of admission to training colleges.
2. Details of the extrance examination.
3. The course of the training colleges.
4. The programme of instruction in different subjects.
5. The practical training.

ELEMENTARY EDUCATION IN THE GRAND DUCHY OF FINLAND.

I.—THE EARLY HISTORY OF THE PEOPLE'S SCHOOLS.

1. The Beginning of Popular Education in Finland.

The desire for popular education, stimulated all over Northern Europe by the Reformation, gradually gained ground in Finland, as in neighbouring countries. The explanation of Christian truths, and the spreading of the knowledge of reading among the people, were from its beginning considered to be the duty of the Lutheran Church, although some time passed before any notable efforts were made to educate the people in a systematic way. Not until the close of the seventeenth century did two bishops of Abo, Gezelius, the elder, and Gezelius, the younger, turn their special attention to this question, but to their work and to that of other churchmen in later times we can trace the general knowledge of reading which gradually became diffused throughout the Finnish people.

With a few exceptions, however, there were for a long time no special elementary schools for this purpose. It was left to the parents to impart to the children the first elements of education, and by yearly examinations and otherwise the clergy sought to secure the efficient discharge of this parental duty. It was also the duty of the sacristan to co-operate in the teaching of children. On this foundation of earlier teaching was based the instruction given to children of 14 or 15 years of age in the classes for confirmation. These classes aimed at explaining to the young the truths of religion. This slender portion of popular education was for a long time considered to be sufficient.

2. Circulating Schools.

It will be readily understood, however, that the means above mentioned failed to accomplish even this modest aim. In each parish it became obviously necessary to procure the services of teachers qualified to teach reading, and thus towards the close of the last century one school after another arose in which children could obtain primary education. The scanty population and the poor circumstances of our country necessitated the circulation of most of these schools from one place to another. They only stopped at each place for a few weeks. Therefore they were called circulating schools.*

The plan of instruction at these schools was naturally in

* Cp. Article on Welsh Intermediate Education (historical introduction), in Vol. 2, Special Reports on Educational Subjects, C.—8943.

accordance with the ideas of the time. For a long time the curriculum was confined to religious knowledge and reading. The arrangements were also very primitive, the teachers being often very old and unfit for any other work. On that account the instruction given by these schools was inferior and the results unsatisfactory. As a rule there were no special school buildings, but the classes were held in a vacant room in some conveniently situated cottage. But schools even of this modest and temporary kind were not to be found in every parish, and their provision was almost everywhere insufficient.

3. The Session of the Senate of Finland, March 27th, 1856.

Such was the situation towards the middle of this century. It began, however, to be generally acknowledged that the children of the working classes required instruction in a wider range of subjects than religious knowledge and reading. Many persons, even then, recognised the inferiority of the schools. The beginning of a new period had been reached, but there was still missing the indispensable man who could bring a new system into being.

At this time a new reign began in Russia and in Finland. Alexander II. ascended the throne, and visited Helsingfors in the very first year of his reign. On March 27th, 1856, he presided at the meetings of the Senate, stating his august opinion on several questions concerning the development of our country. Thus, among other things, he charged the Senate to prepare a scheme for facilitating the establishment of public elementary schools for the country parishes:—

"Le Sénat est autorisé . . . 3) de présenter un projet sur la manière de faciliter aux communes des campagnes l'organisation d'écoles élémentaires et rurales pour l'instruction du peuple."

These words laid the foundation for public elementary education in Finland.

4. Uno Cygnaeus Begins His Work.

In order to carry out the commands of the Emperor, the Senate of Finland decided to obtain the views and opinions of the three Chapters then existing. Their proposals were afterwards published, and all persons interested in popular education were then invited to express an opinion upon the whole matter within a stated time. The most important and fruitful of all the proposals thus received was that of the inspector for St. Mary's Finnish Congregational School in St. Petersburg, the Rev. Uno Cygnaeus.

This man, who has justly been called the "Father of the Finnish people's school," was born in Tavastehus, 1810, of Finnish parents. After the completion of his studies he took holy orders, and went, in 1839, to the Russian colony in the north-west of North America, as minister to the Lutheran congregation there. After living there for five years he went to St. Petersburg, where he became acquainted with the Pestalozzi-Fröbel theory of education. It was there that he framed the proposals above referred to; and this formed a turning-point in his life.

In the year 1858 Cygnaeus was called upon to organise a system of popular schools for Finland. His first task was to acquaint himself with the existing system of popular education in Finland, and after accomplishing this he set out on his remarkable journey through Sweden, Denmark, Germany and Switzerland. On his travels he met, amongst others, A. Diesterweg, who was then, perhaps, the most prominent man in all Germany connected with popular education, and who undoubtedly exercised considerable influence upon Cygnaeus. But it was in Switzerland that he found the best model of what he was seeking, and he was deeply impressed with the Volkschule or Primary School at Vettingen, in the Canton of Aargau, and especially with the training college for primary teachers.

After his return, and at the instance of the Senate of Finland, Cygnaeus commenced to work out a scheme for the organisation of popular schools in our country. This was completed at the end of the year 1860, and shortly afterwards Cygnaeus was nominated chief inspector of the primary schools in Finland.

5. The Origin of the Present Regulations of our Popular Schools.

After Cygnaeus had submitted his proposals to the Senate, a special committee was appointed to pronounce an opinion upon them. Their consultations resulted in a definite proposal for the establishment of popular schools, and also in a scheme of regulations and a course of instruction for the training colleges for primary school teachers.

The proposals of the committee differed in many points from those of Cygnaeus, the following differences being especially notable:—Cygnaeus had held that there should be only one primary school in the lower standards, in which all children, irrespective of social position, should receive their elementary education. The committee, however, considered this to be merely an abstract theory, impossible of realisation in practice.

To include the teaching of manual work in the curriculum of the primary school was also one of Cygnaeus' favourite ideas. Fröbel's education, "To learn through work," had from the first pleased him, and the thought suggested itself to him to extend this idea from the "Kindergarten" to the primary school. The committee had no actual objection to this, but as they conceived the importance of the manual portion of the curriculum to consist mainly in its practical utilitarian character, they differed considerably from the purely pedagogical point of view of Cygnaeus.

There was, however, another point in which a much greater difference of opinion arose between Cygnaeus and the committee: namely, the improvement of children's education at home. This, he felt, was of the very greatest importance for the mental as well as for the physical development of the nation. Cygnaeus' idea was that it should be one of the chief duties of the women teachers to bring about this improvement. To prepare them for this task, he suggested the foundation of so-called "crèches," "kindergartens," in connection with each training college for women teachers, in order that the students might thus

have an opportunity for devoting their attention to the bringing up of small children. With the same object he held that such crèches ought also to be established in connection with girls' primary schools. Against this, however, the committee raised the objection that when once the primary school had raised the standard of general education, and had elevated public sentiment, it would naturally exercise a good influence on the children's homes; while, on the contrary, a mechanical exercise in the bringing up and nurture of children would certainly awaké aversion.

The whole scheme was at length decided upon by the Senate of Finland and by the Emperor, the result being very largely in favour of Cygnaeus' plans, and the outcome was the first Primary Education Act, of May 11th, 1866. The actual form and wording of the Act were, it is true, the work of the committee, but the thoughts and ideas of which it was the outcome were those of Uno Cygnaeus.

6. The Establishment of Training Colleges for Teachers in Primary Schools.

One of the first requirements in connection with the establishment of the Finnish primary schools was to obtain capable teachers. In 1863 a temporary Finnish training college for men and women was founded in Jyvœskylœ at the north end of Lake Pâijânne. Cygnaeus was appointed principal of this training college, as well as chief inspector of schools. In addition, several other masters and lady teachers interested in the scheme were selected to give instruction in the training college. Many of these had previously visited Switzerland, at the expense of the Government, with a view to preparing themselves for their future calling.

After the new primary school regulations had been made statutory, the training college at Jyvœskylœ was permanently established; it remained for nearly twenty years the only Finnish training college in our country. The second Finnish training college for men and women was established in 1880, at Sortavala, in the east of Finland, and 16 years later, in 1896, two other Finnish training colleges were founded, one in Brahestad, in the north, for women, and the other in Rauma, in the south-west of Finland, for men. In 1871 there was also started a Swedish training college, for women, in Ekenâs; and in 1873 one for men in New Karleby.

7. The Progress of the Board School System during the last Decades.

During all this period the number of board schools was constantly increasing. In the school year 1865-66 there were only twenty board schools in the country, and the towns were still without any. Ten years later, however, most of the towns possessed one board school, and in the country districts there were as many as 285. At this time there were 180 teachers and 6,783 pupils in the towns. In the country the corresponding numbers were 294 and 11,421. The progress made

by the country cannot be said to have been rapid; but, considering that the organisation was entirely voluntary, it is certainly noteworthy.

During the following years the interest in board schools steadily increased. In 1885-86 there were in the country 667 schools with 683 teachers. The number of pupils had also increased to 27,305. It is, however, only in the present decade that the system has become popular in the fullest sense. Higher board schools have been established everywhere, and many of the parishes now possess more than one. At the same time, the number of parishes without a school at all has steadily decreased, so that of the total number of 479 parishes in Finland, hardly twenty at the present time are without any school. The total number of board schools in the country parishes was, in 1895-96, 1,273, with 1,396 teachers and 56,956 pupils.

But in spite of this progress there still remained in 1895-96 139,745 children in Finland between the ages of 9 and 13 who did not attend any public school. This was due to several causes; principally to a certain indifference shown by parents to the value of education, partly to poverty, and, in some instances, to a want of schools, or to their inconvenient situation. Consequently the idea has gradually gained ground that voluntary or permissive education does not and cannot reach the required goal of universality, and, therefore, that attendance at a public primary school must be made universally compulsory. As various circumstances do not, at present, allow of this reform, a compromise was arrived at last spring, under an Act passed by the Diet, supplying the greatest deficiencies, and thus meeting the worst of the needs. On the proposition of the Emperor Grand Duke, the Diet decided to divide the country into school districts, in which schools were to be established in such a way that the distance from home to school should not exceed five kilomètres for any of the pupils. At the same time it was decided that in each district a board school should be founded as soon as there were 30 children of a fixed age to attend it. These decisions will bring about a complete change in popular education in Finland. By its means permissive elementary education in the country will, in time, be replaced by a system of more universal application.

II. THE PRIMARY SCHOOL IN FINLAND, AS NOW EXISTING.

1. General Outlines.

The course of a complete Finnish primary school is intended to cover six years. It is divided into two parts, the first of which, lasting two years, is to be passed in the *lower school;* the second, lasting four years, in the *upper school.* In order to be admitted to the first, or lowest, class of the lower school, a child must be seven years old, and consequently the children are as a rule 13 years old when leaving the school.

These are the general outlines of the schools in towns. In the country, however, only the upper school exists. In these, just as in the upper

portion of the town schools, the course of instruction lasts four years. The children are admitted to the school on reaching the ninth year, and leave as a rule as soon as they are 13.

But while no previous elementary education is required for admittance into the lower board school of the towns, every child wishing to be received into the lowest form of the country primary school, *i.e.*, at nine years old, must be able to read fluently, and possess as much religious knowledge as can be acquired at home or in any infant school.

2. The Lower Elementary School in Country Districts.

As has been shown above, there are no regularly established *lower* board schools in the country distr'cts; but the ecclesiastical law in force, as well as the regulations for public primary schools, stipulate that the first instruction in reading and understanding the mother tongue, and in the elements of religious knowledge, are to be gained principally at home. This was always the practice in former times, and in theory it is supposed to be so still.

But experience shows that the homes often fall short of their duty in this respect. This state of things has caused the issuing of a regulation, according to which the *parishes* have to make good the deficiencies in home education by providing sufficient elementary school accommodation for the children, either at regular or at circulating schools. Both the Ecclesiastical Law and the Primary Education Regulations contain clauses to this effect, and it is upon these that our present circulating schools are founded.

This circulating school is, in fact, the only one in the country districts corresponding to the lower board school of the town. But while, on the one hand, the board schools in towns, and the higher board schools in the country, have always been Municipal institutions, the circulating school is entirely an Ecclesiastical institution, and consequently outside the specific limits of the board school system. But the board school regulations have considerably extended the former plan of instruction of the circulating schools, and in these the children are now taught, not only religion and reading, but also arithmetic and singing.

Attempts have been made to improve these schools in other respects also. Some private training institutes for teachers of circulating schools have been opened, and, in order to make it possible to keep circulating schools for a period of several weeks in the same place, the number of pupils in each school has been diminished, while the number of the schools has been increased. It should be added that a considerable movement is now perceptible, which aims at raising the level of the circulating school without altering its ecclesiastical character, in order to make it an educationally suitable foundation for the work of the higher board school.

3. The Infant School.

The board school regulation now in force contains the following stipulation concerning the country board school:—"If it is found that the pupils of the higher board school cannot leave their homes without

serious inconvenience during the pressing time of work in the spring and autumn, they are allowed to withdraw from school for those periods; and in place of the board school an infant school must be opened especially for children intending to apply for entrance into the board school in the following autumn."

The autumn term of the country higher board school begins generally on August 20th; but, in consequence of the regulations just quoted, the classes do not all commence work at the same time, the first weeks (generally up to the end of September) being devoted in most parts of Finland to the rudiments of education. At the end of the spring term, however, this rudimentary instruction is now becoming more and more rare, though it is still permitted by the board school regulations.

The infant school, as the board school is called during this period in which the first rudimentary instruction is given, is at best frequented only by children preparing for the lowest class of the board school proper. In these cases the examination for admittance to the lowest class of the board school must be passed on the opening day, usually the 20th of August, and the instruction of this division lasts about six weeks at most.

But the infant school nowadays usually serves as a kind of substitute for the lower board school in the country. Children in very different stages of knowledge apply for admission, from beginners in their first alphabetical stage, to those who are old enough and sometimes also advanced enough in elementary education to be received into the board school. These widely differing standards are generally formed into two divisions. The higher one consists of those children who are sufficiently advanced to be received into the lowest class of the board school by the autumn, at the close of the infant school course; while the lower division includes the rest of the children.

At a school of this type the pupils are principally taught reading, together with Scripture-history, arithmetic, geography, writing, and singing. The programme of the infant school is, to put it briefly, to improve their reading, to give elementary knowledge of Scripture-history, to teach the children to use the numbers from 1 to 100, to describe their native place, thus preparing them for future instruction in geography, and to teach them writing and singing. It aims at giving the first division of the board school, or to the children intending to join the first division, such an education and such insight into school discipline as will enable them to follow the instruction without much difficulty, when all the forms commence their regular work, which is, at latest, in the beginning of October.

4. The School Year and the Working Hours of the Board School in Finland.

The school year of the board schools in towns begins generally on the first week-day of September, and lasts at least thirty-two weeks; it ends on one of the last days of May or at the beginning of June. The Christmas holidays—two or three weeks in all—divide the school year

into two terms. In the lower board school the instruction lasts four hours a day; in the higher, five to six hours.

The school year of the higher board school in the country begins at latest on the first week-day of October, when all the forms must be present. The harvest being then already gathered and the outdoor work nearly finished, the pupils of the higher forms are free to commence school. The board school breaks up a few days before Christmas, opening again about the middle of January, and continuing till the end of May or to the beginning of June. The board school regulation does not contain any distinct rules concerning the conclusion of the school year; it only stipulates that the school is to be carried on for thirty-six weeks in the year, of which time six weeks at most may be devoted to the infant school.

The number of the hours of study varies from thirty to thirty-six a week, to be evenly distributed over the six working days. The European custom, according to which the teacher is quite free from school work on one day in each week, besides Sunday, is almost unknown in Finland.

The work begins either at eight o'clock, at half-past eight, or at nine o'clock in the morning. After a prayer, lessons go on for fifty minutes. Then follows a break of ten minutes in the playground, after which lessons are resumed for another fifty minutes. With similar breaks work goes on for three hours. Then follows the dinner time, lasting sometimes only half-an-hour, sometimes one hour or more; this varies in the different schools. The work begins again ten minutes after the hour, and goes on, in the same way as before the dinner, for two hours. At two or three o'clock school generally breaks up for the day.

5. The Programme of Instruction in the Higher Board School.

(*a.*) *In General.*

The subjects of instruction in the board schools are determined by regulation and by practice. The first place is given to religion, which is compulsory in all board schools. Other compulsory subjects are the mother-tongue, arithmetic, geometry, geography, general history, history of the native country, natural science, singing, drawing, and manual work.

The board school regulation, enumerating all those subjects, allows the guarantors of a school to include also other useful branches of knowledge in the plan of instruction. But practice has so limited this privilege that there are hardly any other subjects taught in the board school besides the above mentioned, except hygiene, which is generally given in connection with natural science. Practical subjects, such as farming, house-keeping, cookery, etc., do not belong to the plan of instruction, but are taken up in some degree at the so-called finishing schools.

(*b.*) *Religion.*

In the towns, Scripture history is taught even in the lower board school, some hours or some half-hours a week being devoted to this

subject in both the classes. In these classes, however, religious instruction is given without the aid of manuals, the course containing selected stories from the Old and from the New Testaments. In the lowest class of the higher board school regular instruction in Scripture history begins, and the whole course is gone through in two years, four hours a week being given to religious teaching. In the time-table of the third and of the fourth classes, two hours a week are generally given to the repetition of this subject and to Bible reading. During the remaining two hours a week, Luther's Catechism, with comments, approved by the Church of Finland, is taught in its entirety in the two highest forms.

In the lower forms of the higher board school in towns the Catechism is not generally taught as a separate subject.

The programme of the country board school very often contains five hours a week of religious teaching. Of these lessons, three are devoted to Scripture history and two to Catechism in all the classes. Under the circumstances lessons begin with religion on four days a week, and the last lesson on every Saturday is always devoted to this subject.

In the country board school Scripture history is taught in its entirety during the first two years, the following years being devoted to the repetition of it and to Bible reading. The Catechism is generally taught from the lowest class upwards, at least in schools with only one teacher.

(*c.*) *The Mother-tongue.*

In the lower board school in the towns, instruction in the mother-tongue aims only at giving rudimentary education in reading and in writing; some hours a week are often given also to object-lessons in order to develop the observation of the pupils and their power of expressing themselves.

In the higher board school in towns, and also in the country, the mother-tongue is taught for eight hours a week in both the lower classes, and for six hours a week in the higher classes, including the writing lessons. Reading and writing claim, of course, the greatest part of the school time. The former is learnt by reading appropriate books; in writing are included both caligraphy and orthography, and in the higher forms composition and book-keeping. As the Finnish language is spelt quite phonetically, orthography is easily learnt in Finnish schools. The teaching of grammar, which is begun as early as the lowest or the second classes, requires, in order to give the pupils even the most general outlines of it, at least one lesson a week in the third and the fourth classes.

(*d.*) *Arithmetic and Geometry.*

The lower board school has to teach the first principles of arithmetic, that is to say, addition and subtraction, and, so far as time allows, all the four rules of arithmetic, dealing with numbers up to 100. The infant school in the country has the same object in view, and teaches the children, without much difficulty, addition and subtraction, dealing with numbers up to 20. More can, of course, be accomplished in cases

where the circulating school has laid a foundation for the board school work. The foundation is thus already laid before the children are received into the infant school, and the latter is then able to take up the work where the circulating school has left off.

In the two lower forms of the higher board school the pupils are taught the four rules of arithmetic with whole numbers. The measures of capacity, linear measures, weights, and the value of Finnish money are also now explained to the children. As the weights and measures of Finland are founded upon the metric system, they are easily taught even in the lower classes. The curriculum of the third and the fourth classes includes vulgar and decimal fractions, single and double rule of three, and calculation of interest. No further arithmetic is taught in an ordinary higher board school.

Geometry is taught in the third and fourth classes of the higher board school. One hour a week is generally devoted to this subject in both classes; the course contains only the most general outlines of geometry, the principles of planimetry, and the calculation of the superficies and the volume of bodies.

(*e.*) *Geography.*

The regular study of this subject also is supposed to begin in the lower board school. In the second standard the object lessons aim at giving the pupils some knowledge of the neighbourhood surrounding the school. The infant school in the country should also teach some amount of geography, but this instruction is of course limited to the barest rudiments of geographical knowledge.

In the higher board school the instruction of geography begins with the native country, and afterwards takes in all Europe. In two years this part of the subject is gone through, two lessons a week being devoted to it. In the third and fourth forms the other parts of the world are learnt, the geography of Finland is taught in greater detail, and the whole course is repeated. The instruction concerning the earth as a planet and other relevant facts is sometimes given in connection with geography, sometimes also during the lessons in natural science. One or two hours a week are generally given to geography in both the higher forms; but this varies in different schools.

(*f.*) *History.*

The regular instruction in history ought to begin in the third form of the higher board school, and this is generally the case in most schools. The history of the native country is considered the most important part of this subject, but general history is also taught in all Finnish board schools as a foundation for, and an explanation of, the history of Finland. In all, three hours a week are given to this subject during the last two years, one half of the lessons being devoted to the history of Finland and the other half to general history. In this way it is possible for the teacher to give systematic instruction in this subject, and to teach the history of Finland more thoroughly. In connection with history, a short introduction to the study of sociology and of the constitution of the Grand Duchy of Finland is given.

(*g.*) *Natural Science.*

Zoology, botany, and physics are nowadays the only branches of natural science which are taught in the Finnish board schools. Hygiene and anatomy gain more and more ground, whereas chemistry is but very seldom taught as a separate subject. Some elementary instruction concerning the earth and its relation to the solar system is sometimes given in connection with natural science. This subject is generally commenced in the third form of the higher board school, the whole course being consequently completed in two years. In the country two hours a week are usually given to this subject during the two last years, but in towns the number of the lessons in natural science in the two higher forms is sometimes increased to five and even to six a week in all.

(*h.*) *Manual Work.*

Gymnastics, drawing, singing, and manual work are compulsory in the Finnish board schools. Manual work is one of the most important subjects in these schools, and therefore should be treated more in detail.

Some hours a week may be devoted to manual work even in the lower board school, but in the country the instruction in this subject begins always in the lowest form of the higher board school, and is carried on in all the forms, the programme containing at least three, very often four, and sometimes six hours a week of manual work.

The programme of instruction in this subject is, of course, twofold. The boys are taught to work in wood, beginning with some simple piece, such as a lath, and proceeding to more and more difficult tasks, after the pattern collection in use. The instruction of the girls includes needlework and stocking-knitting, also in accordance with a certain programme, proceeding from easier to more difficult tasks, and concluding with the making of a dress. Both these programmes aim at developing in the children dexterity, practical skill, and a sense of beauty.

In most board schools there is now a separate workroom for boys, with planing benches, the necessary tools and a lathe, whereas the needlework instruction for girls is usually given in the same room as the other objects of the curriculum. A sewing machine is nowadays to be found in many board schools.

At mixed schools with only one regular man teacher, this teacher gives instruction in manual work to boys, and a lady teaches the girls. In the larger towns, however, a special teacher for boys' manual work is usually engaged. And in those mixed country board schools also, which have only one woman teacher, it is in most cases necessary to engage another teacher for manual work, to instruct those children that are not of the same sex as the head teacher. It is true that the women teachers of some board schools have passed a course in woodwork, and consequently are able to instruct the boys to work in wood, but this is always an exception.

The development of the mixed schools is clearly tending towards an organisation that necessitates the engagement of an assistant teacher

for manual work, with an extra salary, either a man or woman, according to the sex of the head teacher.

(i.) Gymnastics, Singing, and Technical Subjects.

These subjects are still in process of development, especially in the country, and therefore not much can be said here in regard to them.

Generally, there is no special apparatus for gymnastics in our board schools. At best it is practised in the workroom, but usually in the class-room, or else the yard serves as the only gymnastic hall. The time-table allows at least two half-hours a week for this subject.

In towns, the instruction in drawing may begin in the lowest form of the lower board school, two hours a week being devoted partly to freehand drawing, partly to geometrical drawing, during the whole school time. In the country this subject has always been considered a secondary one, and as serving to keep the higher forms occupied during a couple of lessons while the teacher is engaged in instructing the lower classes. These have not generally been taught drawing at all until quite lately, and consequently there is not much to be said in regard to this subject as taught in the country board school. But recently there has been introduced one regular drawing lesson a week, in which all the classes join, and the instruction in this subject is improving greatly in the country districts.

Two hours a week are generally allowed for the teaching of singing during the whole school time. The board schools in our largest towns have special teachers for this subject, and the instruction in them is naturally very good; it includes both singing and the theory of music, whereas in the country the state of things is much less advanced in this branch. But the instruction of singing was vastly improved by the introduction of the method of Dessirier, which is gaining ground in the country board schools, and consequently good singing is becoming more and more general throughout all Finland.

6. The Plan of Instruction in Board Schools with only One Teacher.

One of the greatest difficulties with which the board school teacher may have to contend is the management of four divisions at the same time, the pupils being of different ages as well as different standards. Of course, if all the standards were to receive instruction in different subjects during the same lesson, the attention of the teacher would be so divided that there could be no question of good methods and of really useful instruction. To avoid this difficulty the teachers now generally arrange the instruction so that only one lesson is heard while the next is being prepared in one hour; in other words the teacher acts as if he had to manage only one division. For this purpose he unites two classes into one group, by giving them the same task, the other two classes being engaged in silent work during this time. In this case, either alternate instruction or concentric teaching is practised. This method may best be explained by some examples.

Religion is almost the only subject which is taught to all forms at the same time. In Scripture history and Catechism only one task is generally given to all the forms. Scripture history is taught in the following way:—The Old Testament and the New Testament are read by each class in alternate years. The first and the second forms will consequently have the same lesson, which thus is quite new to both. The third and fourth forms join the lower classes, learning as a repetition the same task. But, in addition to this, the higher forms read from the Bible the corresponding chapters or other appropriate verses. In this way it is possible to teach one subject at the same time to all classes, and a unity of instruction is achieved which otherwise would have been quite impossible.

Arithmetic is generally taught to all forms in the same lesson. The first and second forms are united in one group, and so are the third and fourth forms. While one group is being instructed, the other is doing sums by itself. The lower group is taught concentrically, at least to this extent, that to the second class are given more difficult arithmetical questions than to the first. In the higher group, however, the instruction is sometimes alternate, sometimes concentric, or both methods combined.

In geography the first and second forms are united into one group, and so are the third and fourth classes. The course of the first group is completed in two years; it comprises the geography of Finland and of other parts of Europe; the first form learning only the principal facts and the second form studying the same lesson more in detail. The courses of the higher forms are alternative, the one including the geography of the world, the other course consisting of a more extensive geography of Finland. The latter part of the school year is always devoted to repetition.

The study of history, which is, in fact, limited to the higher standards, is taught in alternative courses, one year being devoted to the history of Finland, the other year to general history. In the fourth form the course of the preceding year is always to be repeated in connection with the subject in hand.

Thus, by alternate or by concentric instruction, it is possible to give to all the forms only one lesson in each subject. The following time-table, as typical of the plan of work in the country board schools, indicates how, in order to achieve the same purpose, the "silent" subjects are arranged:—

MONDAY.

Hour.	Group.	—	Hour.	Group.	—
8— 9	1—4	Religion.	1—2	1—2	Writing.
9—10	1—2	Reading.		3—4	Natural History.
	3—4	Arithmetic (silent).	2—3	1—4	Singing.
10—11	1—2	Arithmetic (silent).			
	3—4	History.			
11—11½	1—4	Gymnastics.			

TUESDAY.

HOUR.	GROUP.	—	HOUR.	GROUP.	—
8— 9	1—2	Arithmetic.	1—2	1—4	Manual work.
	3—4	Geometry.	2—3	1—4	Manual work.
9—10	1—2	Writing.			
	3—4	Geography.			
10—11	1—4	Mother Tongue.			

WEDNESDAY.

HOUR.	GROUP.	—	HOUR.	GROUP.	—
8— 9	1—4	Religion.	1—2	1—4	Writing.
9—10	1—2	Geography.	2—3	1—4	Drawing.
	3—4	Arithmetic (silent).			
10—11	1—2	Arithmetic (silent).			
	3—4	History.			

THURSDAY.

HOUR.	GROUP.	—	HOUR.	GROUP.	—
8— 9	1—4	Religion.	1—2	1—2	Writing.
9—10	1—4	Arithmetic.		3—4	Natural History.
10—11	1—4	Mother Tongue.	2—3	1—4	Singing.
11—11½	1—4	Gymnastics.			

FRIDAY.

HOUR.	GROUP.	—	HOUR.	GROUP.	—
8— 9	1—4	Religion.	1—2	1—4	Manual work.
9—10	1—2	Reading.	2—3	1—4	Manual work.
	3—4	Writing.			
10—11	1—2	Drawing.			
	3—4	History.			

SATURDAY.

HOUR.	GROUP.	—	HOUR.	GROUP.	—
8— 9	1—4	Arithmetic.			
9—10	1—2	Geography.			
	3—4	Drawing.			
10—11	1—4	Mother Tongue.			
11—12	1—4	Religion.			

7. THE CENTRAL AUTHORITY FOR THE BOARD SCHOOLS IN FINLAND.

The Central Authority for all the schools in Finland is the Superior Board of School Management (Koulutoimen Ylihallitus), resident in Helsingfors; it holds authority direct from the Senate of Finland, and the head of the Ecclesiastical Department. An inspector of the board schools is attached to the Superior Board of Management. But some

weeks ago the Senate of Finland decided to submit to His Majesty a proposal that there should be attached to the Superior Board of Management a board school department, consisting of two chief inspectors, and of two board school inspectors..

The local inspectors hold their authority direct from the Superior Board, and have the direct supervision of the board schools. There is a school inspector to every town; and country districts are divided into 16 districts of inspection, each with an inspector, who has to visit about 100 schools. The towns are in every respect more independent; in a certain degree they are free to make their own arrangement in regard to their board schools; as for instance, in regard to the fixing of teachers' salaries, and the electing of their board school inspectors. The inspectors of the country board schools, on the other hand, are nominated by the Senate of Finland, after consulting the Superior Board of Management.

Every town has a school board, which, together with the board school inspector, has the oversight of the local board schools. There may be a separate school board for each country board school, but generally all the board schools in one parish are under the control of one board. Any respectable man or woman interested in popular education may be elected a member of a school board. The minister of each parish is, as a rule, a member of the school board, not compulsorily, but by election like the other members. The teachers have a right to elect a member of the school board among themselves, and in parishes where there is only one teacher he becomes a member without election.

8. The Position and the Salary of the Teachers.

All teachers who have passed through a training college for board school teachers (seminary) may apply for regular employment at the board schools in the country as well as in towns. No candidate can obtain a post in a board school without presenting a certificate from a training college.

When a situation at a country board school is vacant it is advertised to be applied for within a certain time, of at least 30 days. The school board has full liberty to elect a teacher from among the competent candidates, but the result of the election must be submitted to the inspector, who has to make inquiry whether the teacher has been nominated according to law, and, in that case, to sanction the election.

The teacher is nominated for two years of probation. This period having elapsed, the teacher can be dismissed if the inspector and the school board agree as to his or her incapacity. But if they do not agree, the question is submitted to the Superior Board of Management. The teacher who is re-engaged after the two years of probation receives a commission and cannot be dismissed against his will, without the judicial decision of the Senate of Finland.

A man teacher receives 800 marks (£32) in salary from the Government, and a woman teacher 600 marks (£24) (1 Finnish mark equals 1 franc). The Government grants an increased salary of 10 per cent. after five years of irreproachable service, an additional 10 per cent. again after 10 years, the same sum after 15 years, and after 20 years

another 20 per cent. of the original salary, or a total of 400 marks to the man teacher, and 300 marks to the woman teacher.

Whether the Board School be maintained by a whole parish, or by a part of a parish, or by a private individual, he or they, as the case may be, must pay the teacher, in addition to the salary paid by the Government, at least 200 marks a year in cash or the same amount in kind, and in addition to this provide the teacher with two dwelling rooms and a kitchen, and necessary fuel. One-half of the school fees, viz., one mark a year per scholar, is also given to the teacher; this generally amounts to 50 marks. The lowest salary of a man teacher is thus about 1,050 marks (£42), and of a woman teacher about 850 marks (£34), besides fuel and furnished rooms in both cases. But the supporters of the school often pay more than 200 marks (£8) to their teacher, the lowest local increment being generally 100 or 200 marks (£4 to £8) more than that amount.

After having served irreproachably for 30 years a teacher receives from the Government a full pension of 1,000 marks (£40) a year in the case of men, and 750 marks (£30) in the case of women, for the rest of his or her life. They may also obtain a pension, proportionate to their time of service, if they are permanently incapacitated by illness.

Thus the financial position of the teacher is pretty well secured even if he becomes incapable of service before the expiry of the normal term.

It was mentioned above that the towns have considerable independence in the matter of their board school arrangements; consequently the salaries of the teachers are different in different towns; they are, as a rule, so good that there is no need for towns to be satisfied with inferior teachers.

9. How Much do Finnish Board Schools Cost?

In estimating the general cost of our board schools it would be useless to state the total expenditure, whether of the Government, or of parishes, or of private individuals, as the whole system is in process of such rapid and ceaseless development that no estimate would give any correct idea of the relation of expenditure to supply. It will, therefore, be simpler to state how much each separate school costs the Government and the supporters of the school respectively.

The Finnish Government and the Diet have, as a rule, been very liberal to the board schools. The Estates have made grants towards the above-mentioned salaries, and towards the increments to the teachers in country schools. The Government generally pays 80 per cent. of the original salary of the men teachers, exclusive of the rent of the rooms, and 75 per cent. of the original salary of the women teachers. This proportion is, of course, increased when the decennial increments are added.

The supporters of a school have to furnish one large schoolroom, as well as two dwelling rooms, and a kitchen for every teacher.

As the number of scholars which one teacher is considered capable of teaching is 50, every schoolroom must be large enough to hold this number easily. Besides the schoolroom there is very often a separate room for woodwork and gymnastics, generally in the same building. The

storehouse, the room for fuel, and other necessary out-houses, form another block, the building and maintenance of which are incumbent on the supporters of the school.

In order to make the school-houses in the country as convenient as possible, a collection of model drawings of school-houses has been published on the initiative of the Government. After the pattern of these drawings many fine modern school-houses have lately been built in the country, adding much to the beauty of it. The inconvenient rented houses are, consequently, becoming more and more rare. The building of a modern school-house costs generally about 8,000 or 10,000 marks (£400).

The school has then to be furnished with writing desks, chairs, and other necessary things, and also with materials for instruction. Among the last a planisphere, a map of Finland, of Europe, and of Palestine, an abacus, geometrical figures, an anatomical atlas, an atlas of natural history, many kinds of tools for manual work, a blackboard, a clock, etc., are indispensable. All this furniture and the materials for instruction cost a little more than 1,000 marks.

The school being thus organised, the supporters have also to provide money for the yearly expenditure. Besides the local salary of the teacher, amounting at least to 200 marks, or the same amount in kind, the supporters have to pay a sum varying from year to year for keeping the buildings in repair. Moreover, they have to furnish all the rooms with fuel, to supplement the materials for instruction, and to pay other incidental expenses. In schools with only one teacher they must further give about 100 marks as salary to a teacher of manual work for pupils that are not of the same sex as the school teacher. All these expenses vary, of course, very much at different times, but on an average they may be estimated at about 1,000 marks a year.

The above cover the principal part of the local expenditure; in addition to this the Finnish Government and the Diet grant supplies for many purposes, such as pensions to the teachers, and the allowances of 50 to 75 marks to the teachers of manual work in mixed schools, for pupils that are not of the same sex as the head teacher of the school. The Finnish Government also makes other grants in order to improve the instruction in manual work. When in a new school the first set of tools for boys' manual work is bought, the Government pays on certain conditions about one-third of the sum. For the purchase of a lathe the Government gives also 80 marks to each school where boys' manual work is taught; and other special contributions are granted every year to several schools for the building of a workroom, for the purchase of a model collection, or for other purposes aiming at the improvement of boys' manual work. In this connection it may be mentioned that when a sewing machine is bought for girls' needlework, the Government pays 40 per cent. of the purchase money.

For the building of school houses suitable to modern requirements, many thousands of marks have been every year either directly granted, or lent on favourable conditions, from the public funds. The Estates have already three times submitted a motion that a vote of credit

should be granted towards the starting of finishing schools for pupils who have passed through the board schools. During the last assembly of the Diet a grant of 21,000 marks (£840) a year was demanded.

For giving the teachers an opportunity of improving themselves, libraries are established in different parts of the country, 17,000 marks a year being granted by the Government for the completion of the libraries. Travelling studentships are given to teachers for attendance at training colleges and also at other board schools. Every third year a general Board School Congress is to be held, at which the teachers from different parts of the country may meet. On these occasions a great reduction of the railway fares is granted to them.

In conclusion it should be mentioned that about 15,000 marks are yearly given to board school teachers as sick relief.

The Government grants from 400,000 to 500,000 marks a year to board schools in towns. But the towns themselves are required to provide the larger part of the expenses. This expenditure varies so much in different towns that it is impossible in this brief article to give even a short survey of the facts.

III. THE TRAINING OF TEACHERS FOR THE FINNISH BOARD SCHOOLS.

1. The Conditions for Admittance into a Training College.

The Board School regulations of Finland contain the following paragraph:—

"All pupils entering a Training College for Board School teachers must be at least eighteen years of age, confirmed, healthy, and of good behaviour; they must possess an amount of knowledge corresponding to the completed curriculum of a higher Board School."

In the spring the applicants have to send the applications to the director of the college. To these applications, which are to be written in candidate's own hand, must be added a certificate of baptism, a rector's certificate, a medical certificate, written according to a certain formula, a Board School certificate, or other diploma indicating a corresponding amount of knowledge, and some other less important papers. The young men and girls, whose applications are accepted, receive from the principal a written summons to the admission examination, which is held at the Training College some days before August 20th in each year. Those examined must possess an amount of knowledge corresponding to the curriculum of a complete higher Board School, or, to quote the words of the regulations in force:—

In Religion.—The Catechism and Scripture history, according to a school book sanctioned by the authorities; the general principles of religious knowledge; the foundation of the Christian Church, according to the Acts of the Apostles, and a short survey of its later development.

In the Mother Tongue.—The ability to read aloud fluently, and to

give an oral as well as a written account of what is read; the ability to write an easy composition, without serious grammatical mistakes; in grammar, the etymology and the general outlines of the syntax.

In Geography.—The geography of Finland, and the most important parts of the physical and political geography of Europe; a survey of the other parts of the world.

In History.—The history of the native country, according to some short school book; the most important historical events and personages, and especially biographies.

In Arithmetic.—The four rules of arithmetic for whole numbers, simple fractions and decimal fractions, single and double, rule of three, linear measures, measures of capacity, and the weights of the country.

In Geometry.—Elementary geometry; some idea of the most important plane and solid figures, and of the calculation and measuring of their superficies and of their volume.

In Natural Science.—The principles of physical geography; the most important physical laws, explained in connection with the most common and the most remarkable phenomena; some knowledge of the animal and vegetable organisms, acquired by studying the most important animals and plants of Finland, especially the domestic animals, and the cultivated plants, and also the care and the use of them.

In Other Subjects.—The first principles of geometrical drawing, and of freehand drawing; some practice in singing, gymnastics, and manual work in general, according to the natural bent of the candidate.

2. The Entrance Examination.

This is arranged in a different way in different Training Colleges. The following is a short account of the examinations as held at the Training College of Jyvœskylœ during recent years.

On a certain day the examination begins with writing exercises. The first of these is a composition in the mother tongue. As a preparation for it, some teacher of the Training College gives a short lecture, the contents of which are then to be written, and arranged as a set composition by the candidates. Two hours are generally allowed for this. The second written exercise is generally that of arithmetic. About five arithmetical questions are to be solved, and for this work also two hours are allowed. All the written exercises are then examined, and only those pupils who have passed them satisfactorily have a right to take part in the oral examinations. Those who pass all these examinations are then declared ready for admittance into the Training College. The pupils are not examined in drawing, manual work, and gymnastics. But as a rule there is a greater number of pupils ready for admittance than there are vacancies, and therefore the marks obtained in different subjects by the pupils are counted, and only the best 36 pupils may enter in the first form. If a pupil has no talent for singing, and if he is among the last of those 36 chosen pupils, he generally has to give place to another, if the latter is a good singer, and one of the first among those pupils who could not enter for want of vacancies.

But a candidate does not gain the right to stay for the full course at the Training College by merely passing the entrance examination.

The admission is at first only for one probationary term, during which the pupils study at the Training College. If during that term they make satisfactory progress, and show such qualifications as are required of a future teacher, they are definitively admitted into the Training College, and allowed to continue their work as regular students.

3. The Course of Study at the Training Colleges.

The curriculum of a Finnish Training College is designed to cover four years. The first three years are devoted to intellectual and technical pre paration, the fourth year principally to practical exercises in teaching. After having passed three forms, the pupil is examined in all the subjects belonging to the curriculum, and then he is admitted into the fourth form, being now called a candidate. The last year is devoted to pedagogics, to questions of methods in different subjects, and especially to exercises in teaching.

The school year of a Training College begins on August 20th, and ends in the middle of June. The Christmas holidays, lasting three weeks and a half, divide it into two terms. Thus the real work time lasts about 40 weeks each year.

The weekly lessons vary from 38 to 45 in the lower forms of the Training College. Generally there are seven lessons a day. School begins usually at a quarter past eight in the morning, after a prayer, and goes on for nearly two hours, divided by a recreation time of ten minutes, till ten o'clock. The breakfast hour then follows. At ten minutes past eleven the work begins again, going on for nearly three hours, with ten minutes for recreation between each hour, till two o'clock in the afternoon. The evening lessons are from four to six, and the lessons in manual work for the men are generally from three to seven. The day's work is finished, as it commenced, with a prayer. Wednesday is, however, a half-holiday for most forms, work being finished at two o'clock.

The fourth class or the "candidates" have at most three lessons a day at the Training College.

The above is the way in which the lessons are arranged at the Training College of Jyvœskylœ. The general outlines are the same also at other training colleges for board school teachers in Finland.

4. The Programme of Instruction in Different Subjects.

The simplest way to give a clear idea of the curriculum of our Training Colleges will be to describe simply what was taught at the Training College of Jyvœskylœ last term. It is true that all Training Colleges are not quite similar, but the general outlines of all are, of course, the same.

Religion is one of the most important subjects at a training college. Instruction in it begins at once in the first form, three hours a week being then devoted to it. The Scripture history of the Old Testament is gone through, keeping in view the future work of the pupils. In the same way the Scripture history of the New Testament is learnt, four

hours a week being allowed for it in the second form. The course of the third form includes the Catechism and Church history, three hours a week being devoted to the former subject, two hours a week to the latter.

To the study of the *Finnish Language*, six lessons a week are given in the first form. The greater part of these lessons is wanted for reading and explanation of Kalevala, the national epic of the Finns. Besides this, some fitting selections are read and explained. In grammar, etymology is gone through, and some easy compositions are written. In the second form the pupils have to read Kanteletar, containing the oldest Finnish lyrical poems. Besides this some amount of Finnish prose literature is read, the grammar finished, the analysing of sentences practised, and the writing of compositions continued. Five lessons a week are allowed for this purpose. In the third form also five hours a week are devoted to this subject. Some of these lessons are devoted to teaching a short history of Finnish literature, the other lessons to instruction in the theory of poetry, and to reading Finnish literature. The grammar work is also repeated, but more in detail, the analysing of sentences is continued, and more compositions are written.

Arithmetic is taught in four lessons a week in the first form, and during two lessons a week in the second and third forms. The course is almost the same as in the board school, but it is learnt more in detail, and more thoroughly. The same is to be said concerning the instruction in *Geometry*, for which subject one lesson a week is allowed.

History takes three lessons in the first form, two in the second, and two in the third form. Ancient and mediæval history is learnt first. Then the mediæval history of Finland is taught, and then general modern history; and the modern history of Finland is commenced. The number of lessons in this subject is, nevertheless, rather insufficient, and therefore the last part of the course is generally learnt in the fourth form.

For *Geography*, six lessons a week are allowed, viz., two lessons in each of the lowest three forms of a training college. In the first form the geography of Finland is learnt thoroughly. Then follow the other countries of Europe, and finally the other parts of the world. After that there is given an account of the earth as a planet. The course is generally worked through in two years, the third year being devoted to repetition.

Natural Science is taught during five lessons a week in the first form. The instruction in botany is begun and some plants are examined. Then the construction of the human body is explained, and the instruction in zoology is commenced. Besides this some physics and a short course in chemistry are given in the second form, where three hours a week are allowed for natural science; two-thirds of these lessons are devoted to physics and to chemistry, the rest of the hours to zoology. In the third form two hours a week are allowed for finishing zoology and botany.

To Hygiene one hour a week is devoted, both in the second and in the third forms. The course is limited, in accordance with the number of lessons. In the fourth form a short course in board school hygiene is sometimes given.

The Swedish Language, the other native language of Finland, forms a subject of instruction at the Finnish Training Colleges, as also the Finnish language at the Swedish Training Colleges in Finland. The purpose of this arrangement is to make clear the general principles of the grammar, and to make the pupil understand the second language as well as possible. The Time-table of a Training College allows for this purpose three lessons a week in the second form, and two in the third form.

Drawing is taught during three hours a week in the lowest three forms of a Training College. In the first form, freehand drawing from patterns on the wall and from plaster casts is generally practised. Geometrical drawing and drawing of surface ornamentation belong to the course of the second form. And then follows instruction in perspective. In the girls' department, however, geometrical drawing and perspective are taught less than in the department for men.

For Singing and Instrumental Music several hours a week are allowed in the first three forms of a training college. One lesson a week in each form is devoted to concerted singing, in which both departments with all their forms join, forming a large mixed choir. Of the remaining lessons, two are allowed for the instruction of singing in each form, after the method of Dessirier, according to which singing from notes in all major keys and in most minor keys is practised in the first and in the second form ; a little of the theory of music is also learnt. The exercises are also taught in the third form, and the principles of harmonics are explained. The instruction in instrumental music begins with exercises on the piano, but in the second form the pupils are instructed in harmonium playing, which is practised sufficiently long to enable the pupils to play chorales.

Gymnastics are practised during three hours a week in each form, except the fourth. It is principally meant to be a recreation for the pupils, but one of the lessons in the third form is devoted to the instruction of the theory of gymnastics.

Manual Work is, of course, given in different ways in the two departments, viz. : The men work in wood and in iron, and for this purpose they have seven lessons a week in the first form, eight in the second form, and seven in the third form. During the first two years the pattern collection of woodwork and of ironwork for the board schools is thoroughly gone through. During the third year every pupil generally makes a cane-bottomed chair with turned legs and a carved back, and also some ironwork. Even in the fourth form a course in manual work is given, according to which each pupil has to do some more difficult piece of work ; for instance, a chest of drawers with a toilet glass, a writing table, or something else of that kind : these are done during the free-time, and not during special lessons in manual work. In the girls' department, 5 + 6 + 5 hours a week are allowed for manual work, the aim being to qualify the student to give the instruction required by the board school course.

Psychology and Pedagogics must be mentioned before speaking of the practical exercises of the pupils. The instruction in these subjects begins in the second form of the Training College at Jyvœskylœ, two hours a week being devoted to them. One half of the lessons is given to psycho-

logy, the rest to the history of pedagogics, which is finished in the following year. Actual pedagogics are also taught, and exercises in teaching are arranged in the third form of the Training College, as far as time permits. Three hours a week are allowed for this. Pedagogics are, however, confined principally to the fourth form, where the time-table allows four hours a week for instruction in this subject, including courses on school discipline, on school management, and on the board school regulations.

To give instruction in the subjects mentioned, each Training College has a headmaster, or director, and many teachers, each of whom has received a university education, and very often a high university degree. In Training Colleges for girls, and in the girls' departments of united Training Colleges, there is a headmistress with some women teachers; these as well as the masters give instruction at the College. When the pupils are practising for their future career each teacher has also to supervise the pupils' practical exercises in his own subject.

5. The Practical Training.

The fourth year at a Training College is chiefly devoted to practical exercises. Each Training College has, therefore, a special practising school, and united training colleges, of course, have two such schools, one for boys, and one for girls. These practising schools have six forms, with separate progressive courses, corresponding to the board school forms in towns. Besides these, in some Training Colleges there has been founded a practising school with four united forms corresponding to the higher board school in the country. All these schools have a head teacher, male or female, who has the oversight of the school, and at the same time is obliged to give some standard lessons there.

The instruction at these schools is, nevertheless, given principally by the candidates, who have obtained a thorough pedagogical education during the preceding year, and are thus fairly capable of undertaking the task. At the end of August, when the Training College opens, the subjects of instruction at the practising schools are distributed among the candidates, to each of them being assigned the duty of giving some lessons in each week. It is to be remembered that the lessons in the same subject in a class ought not to be distributed amongst too many teachers, and also that every candidate must give all his lessons as far as possible in the same class. For each lesson at the practising school the candidate has to write a programme; this is examined and corrected by the master of that subject at the Training College. The lessons are then given in accordance with those programmes, the master of the subject in question at the Training College being present as often as possible to criticise the lessons.

In order to give to the students in the fourth form of a Training College an opportunity of teaching as many subjects as possible, these are distributed three or four times during a school year. Thus a candidate has to give instruction in six or seven subjects; in each subject for at least two months continuously.

In the practising school with four united forms, where the instruction is much more difficult than in the practising school with six separate

forms, the headmaster or the headmistress of the school first gives all the lessons. About the middle of the autumn term a portion of the subjects is divided among the candidates. This proceeding is repeated many times during the whole school year, teachers and subjects being changed after every two months. Besides these practical exercises, attendance is required at a certain number of lessons at the practising school with six forms, where the candidates have to do the practical exercises in teaching as well as at the practising school with four forms. The candidates have principally to attend the lessons given by the headmaster or the headmistress of the practising school, but they must also attend some lessons given by the other candidates. Before the changing of the subjects takes place, the candidate who is going to teach a certain subject has to attend all the lessons in this subject during the preceding week in the form he is intending to manage. The object of this arrangement is to avoid the evil arising from constant changes in the teachers at the practising school.

Besides the work in the practising school, the candidates have some lessons at the Training College. At Jyvœskylœ the number of these lessons is eighteen a week. Of these, four are devoted to pedagogics, one of them given by the headmaster or headmistress of the practising school; all these lessons are designed for the pedagogical and methodical preparation of the candidates for their future work.

After having devoted the year to this kind of work, the candidate obtains his diploma, which entitles him to apply for a situation at any board school in the Grand Duchy of Finland.

Autumn, 1897.

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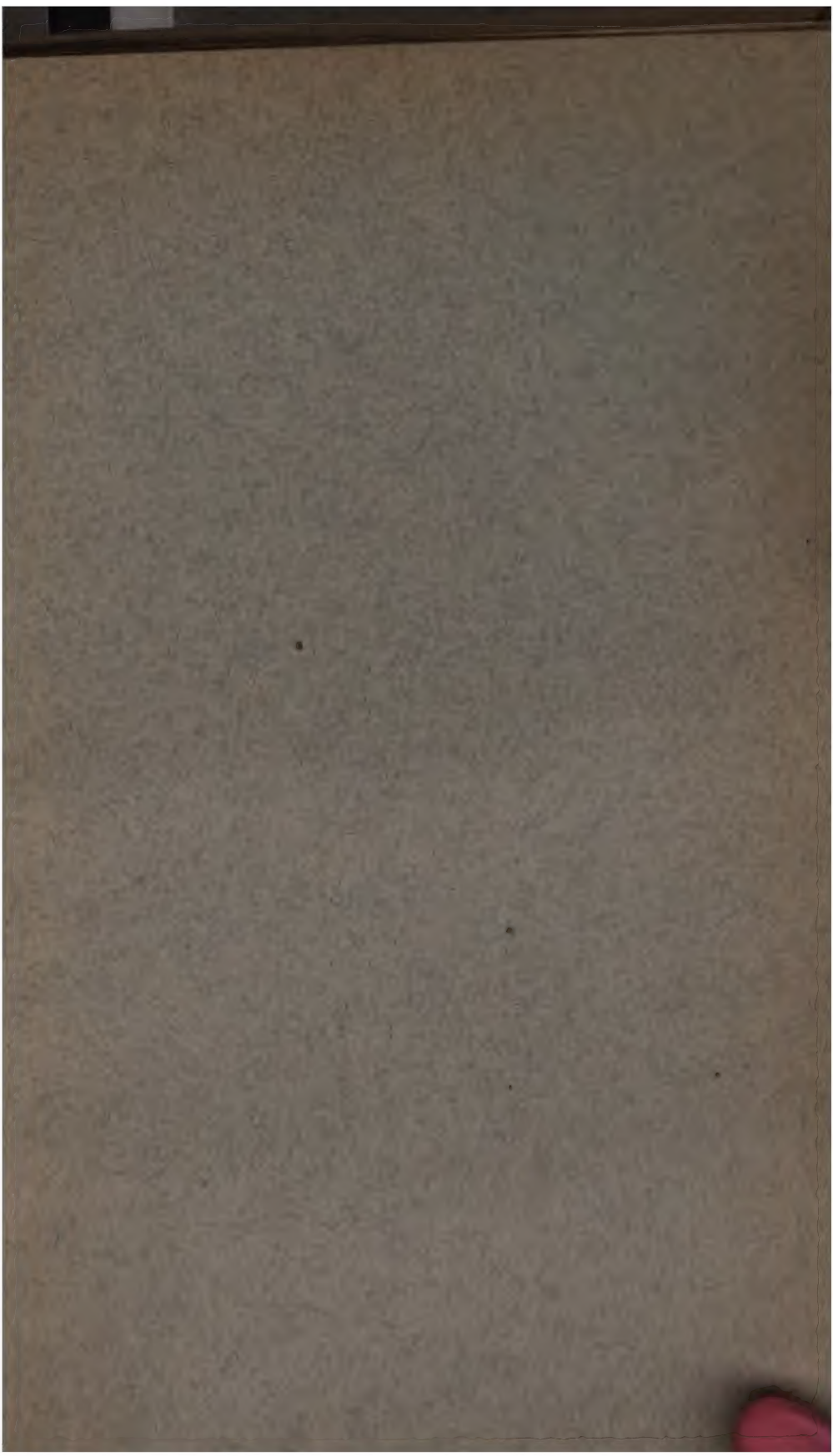

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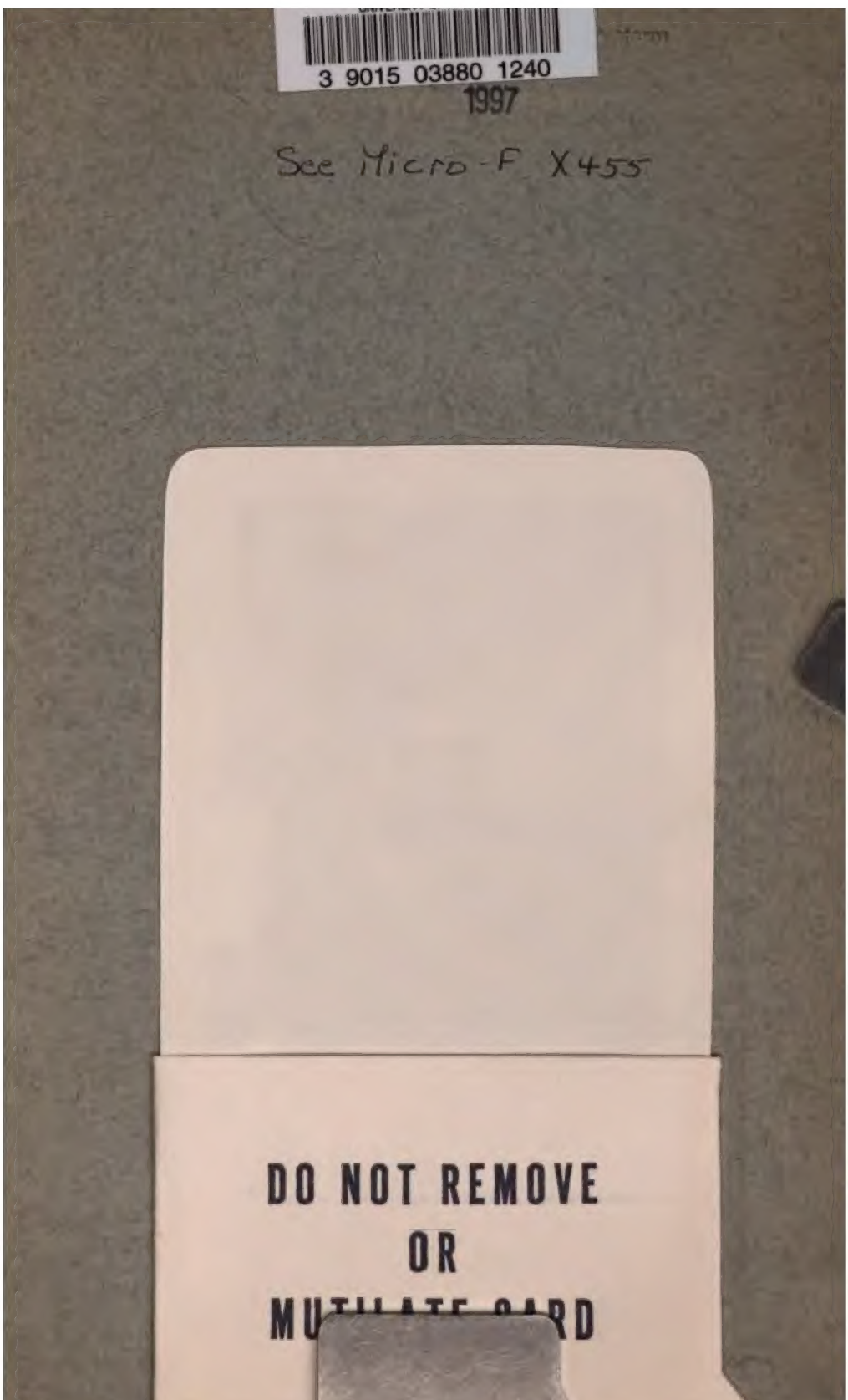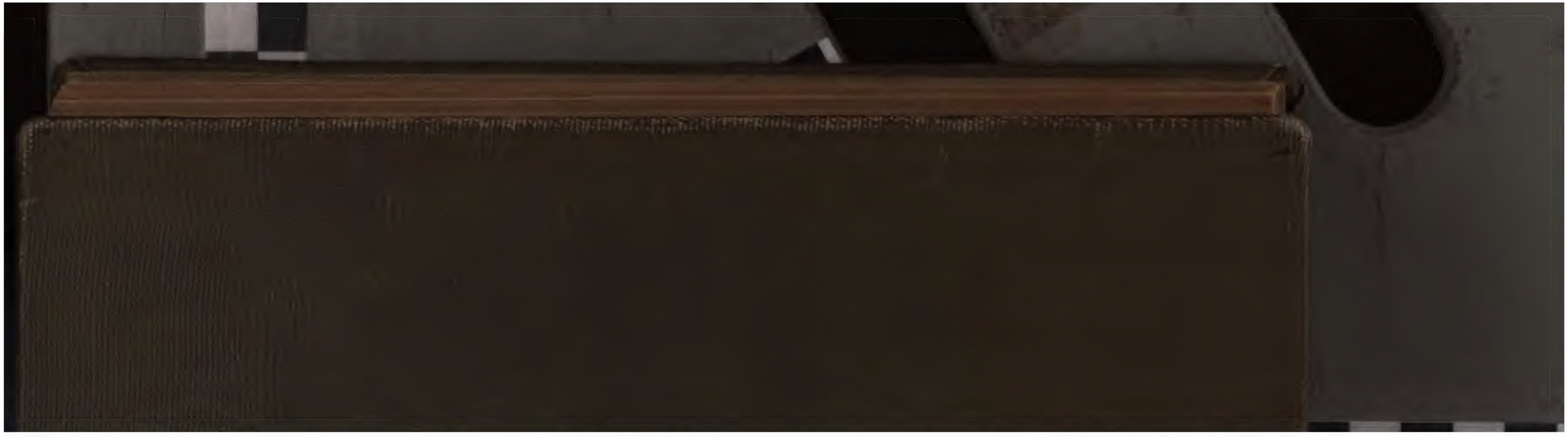
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